CITY OF NORFOLK, VIRGINIA \$22,810,000

Water Revenue and Refunding Bonds Series 2005

Dated: Date of Delivery Due: November 1, as shown on the inside cover

The City of Norfolk, Virginia prepared this Official Statement to provide information pertaining to its 2005 Bonds. This cover page presents a summary of selected information for your convenience and does not provide a complete description of the 2005 Bonds. To make an informed decision regarding the 2005 Bonds, you should read this Official Statement in its entirety.

Tax Exemption Interest on the 2005 Bonds is (1) excluded from federal income tax, (2) not a

specific item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations and (3) excluded from Virginia income tax. Interest may be included in calculating a corporation's alternative

Ratings: (See "Ratings" herein)

minimum income tax.

Interest on the 2005 Bonds may be subject to other tax consequences – See "Legal

Matters" on page 31 of the Official Statement.

Security The 2005 Bonds are limited obligations of the City payable solely from Net

Revenues derived from the City's water system and other funds pledged for their payment under the terms of the Indenture, as herein defined, between the City and SunTrust Bank, as Trustee. Neither the faith and credit of the Commonwealth of Virginia nor the faith and credit of any county, city, town or other political subdivision of the Commonwealth of Virginia, including the City, is pledged to the

payment of principal of, premium, if any, or interest on the 2005 Bonds.

Redemption See inside cover of the Official Statement.

Authority for Issuance Ordinance No. 41,688 adopted by the City on January 11, 2005 authorizes the

issuance of the 2005 Bonds.

Purpose Proceeds of the 2005 Bonds will be applied to (i) provide financing for certain

capital project costs associated with the City's water system capital improvement program, (ii) redeem the City's Water Revenue Bond Anticipation Notes, Series 2004, (iii) pay the premium on any bond insurance policy obtained for the 2005 Bonds, (iv) pay the premium on any surety bond obtained to satisfy the debt service reserve requirement for the 2005 Bonds, and (v) pay issuance costs of the

2005 Bonds.

Interest Payment Dates Semi-annually on May 1 and November 1 beginning November 1, 2005.

Registration Book-Entry Only; The Depository Trust Company. See page 2 of the Official

Statement.

Closing/Delivery Date On or about March 23, 2005.

Bond Counsel McGuireWoods LLP, Richmond, Virginia.

Financial Advisor Public Financial Management, Inc., Arlington, Virginia.

Bond Insurer MBIA Insurance Corporation.

Registrar/Paying Agent SunTrust Bank, Richmond, Virginia.

Issuer Contact Director of Finance of the City.

(757) 664-4346

Dated: March 9, 2005

\$22,810,000 Water Revenue Bonds, Series 2005 (Base CUSIP Number 656009)

MATURITIES, AMOUNTS, INTEREST RATES AND PRICES OR YIELDS

Year of <u>Maturity</u> (November 1)	Principal <u>Amount</u>	Interest <u>Rate</u>	Price or <u>Yield</u>	CUSIP <u>Suffix</u>	Year of <u>Maturity</u> (November 1)	Principal <u>Amount</u>	Interest <u>Rate</u>	Price or <u>Yield</u>	CUSIP Suffix
2006	395,000	3.50%	2.47%	EF0	2021*	705,000	4.75%	4.32%	EW3
2007	410,000	3.50	2.72	EG8	2022*	745,000	4.75	4.38	EX1
2008	420,000	3.50	2.85	EH6	2023*	780,000	4.75	4.44	EY9
2009	435,000	3.50	3.00	EJ2	2024*	820,000	4.75	4.50	EZ6
2010	455,000	3.50	3.15	EK9	2025*	860,000	4.75	4.55	FA0
2011	470,000	3.50	3.30	EL7	2026*	895,000	4.75	4.60	FB8
2012	485,000	3.50	3.45	EM5	2027*	945,000	4.75	4.63	FC6
2013	500,000	3.50	3.60	EN3	2028	990,000	4.50	4.58	FD4
2014	520,000	3.625	3.70	EP8	2029	1,035,000	4.50	4.61	FE2
2015	540,000	4.00	3.80	EQ6	2030	1,080,000	4.625	4.75	FF9
2016*	565,000	5.00	3.90	ER4	2031	1,135,000	4.625	4.66	FG7
2017*	595,000	5.00	3.97	ES2					
2018	620,000	4.00	4.03	ET0					
2019	645,000	4.00	4.10	EU7					
2020*	675,000	4.75	4.26	EV5					

\$5,090,000 4.625% Term bonds due November 1, 2035, Priced at 97.673 to yield 4.770%.

Payment of the principal and interest on the 2005 Bonds when due will be insured by a municipal bond insurance policy issued by MBIA Insurance Corporation simultaneously with the delivery of the 2005 Bonds.



OPTIONAL REDEMPTION

The 2005 Bonds maturing on or before November 1, 2015 are not subject to optional redemption before maturity. The 2005 Bonds maturing on or after November 1, 2016, are subject to optional redemption prior to their respective maturities on or after November 1, 2015, at the option of the City, in whole or in part (in increments of \$5,000) at any time, at par plus the interest accrued on the principal amount to be redeemed to the date fixed for redemption.

^{*} Maturities priced to the November 1, 2015 optional redemption date.

CITY OF NORFOLK, VIRGINIA

CITY COUNCIL

Paul D. Fraim, Mayor

Daun S. Hester, Sr., Vice Mayor Anthony Burfoot Paul R. Riddick

Donald L. Williams Barclay C. Winn W. Randy Wright

MUNICIPAL OFFICIALS

Regina V.K. Williams, City Manager Steven G. de Mik, Director of Finance Kristen M. Lentz, Director of Utilities Bernard A. Pishko, City Attorney

BOND COUNSEL

FINANCIAL ADVISOR

McGuireWoods LLP Richmond, Virginia

Public Financial Management, Inc. Arlington, Virginia

CONSULTING ENGINEER

INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

HDR/EES Portland, Oregon Cherry Bekaert & Holland, LLP Virginia Beach, Virginia



All quotations from, and summaries and explanations of, provisions of law and documents herein do not purport to be complete and reference is made to such laws and documents for full and complete statements of their provisions. Any statements made in this Official Statement involving estimates or matters of opinion, whether or not expressly so stated, are intended merely as estimates or opinions and not as representation of fact. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implications that there has been no change in the affairs of the City or the System since the respective dates as of which information is given herein.

No dealer, broker, salesman or any other person has been authorized by the City or the successful bidder to give any information or to make any representations with respect to the City, the System or the 2005 Bonds, other than those contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by the City or the successful bidder. This Official Statement does not constitute an offer to sell or solicitation of an offer to buy the 2005 Bonds in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

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OFFICIAL STATEMENT

Relating to the Issuance of

\$22,810,000 City of Norfolk, Virginia Water Revenue and Refunding Bonds Series 2005

INTRODUCTORY STATEMENT

The purpose of this Official Statement, including the information contained in the Appendices, is to furnish information relating to the City of Norfolk, Virginia (the "City"), its water system (the "System") and its Water Revenue and Refunding Bonds, Series 2005 (the "2005 Bonds") to be issued in the aggregate principal amount of \$22,810,000. This Official Statement has been authorized by the City for use in connection with the sale of the 2005 Bonds.

The 2005 Bonds will be issued pursuant to the Public Finance Act of 1991, Chapter 26 of Title 15.2 of the Code of Virginia of 1950, as amended (the "Act"). The 2005 Bonds are being issued under the provisions of a Master Indenture of Trust, dated as of November 1, 1993, as previously supplemented and amended (the "Master Indenture"), between the City and SunTrust Bank, Richmond, Virginia, as Trustee (together with any successor, the "Trustee"), and a Sixth Supplemental Indenture of Trust dated as of March 1, 2005 (the "Sixth Supplemental Indenture") between the City and the Trustee. The Master Indenture and the Sixth Supplemental Indenture are referred to collectively herein as the "Indenture." The City has previously issued under the Master Indenture its Water Revenue Bonds, Series 1993 (the "1993 Bonds"), of which \$55,635,000 in principal amount is currently outstanding; its Water Revenue Bonds, Series 1995 (the "1995 Bonds"), of which \$100,745,000 in principal amount is currently outstanding; its Water Revenue and Refunding Bonds, Series 1998 (the "1998 Bonds"), of which \$77,205,000 in principal amount is currently outstanding, and its Water Revenue and Refunding Bonds, Series 2001 (the "2001 Bonds"), of which \$33,820,000 in principal amount is currently outstanding. The 2005 Bonds are the fifth series of Bonds issued under the Master Indenture.

The 2005 Bonds will be limited obligations of the City payable solely from Net Revenues derived from the System and other funds pledged for the payment under the terms of the Indenture. Neither the faith and credit of the Commonwealth of Virginia nor the faith and credit of any county, city, town or other subdivision of the Commonwealth of Virginia, including the City, is pledged to the payment of the principal of, premium, if any, or interest on the 2005 Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS."

The 2005 Bonds will be issued in authorized denominations of \$5,000, or whole multiples thereof, and held in book-entry only form by The Depository Trust Company ("DTC"), or its nominee, as securities depository with respect to the 2005 Bonds. See "DESCRIPTION OF THE 2005 Bonds - Book-Entry Only System." The 2005 Bonds are subject to optional and mandatory redemption prior to their stated maturities. See "DESCRIPTION OF THE 2005 BONDS - Redemption."

Certain capitalized terms not otherwise defined herein shall have the meanings set forth in the Indenture. See "DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" included as Appendix C to this Official Statement.

All financial and other information presented in this Official Statement has been provided by the City and other sources that are believed to be reliable. The presentation of information is intended to show recent historic information and is not intended, unless specifically stated, to indicate future continuing trends in the financial position or other affairs of the System. No representation is made that past experience, as is shown by such financial and other information, will necessarily continue or be repeated in the future.

This Official Statement should be considered in its entirety, and no one subject discussed should be considered less important than any other by reason of its location in the text. Reference should be made to the laws, reports or other documents referred to in this Official Statement, including the Indenture and the Feasibility Study, hereinafter defined, for more complete information regarding their contents.

AUTHORIZATION AND PURPOSE

The 2005 Bonds have been authorized by Ordinance No. 41,688 enacted by the City Council on January 11, 2005. The City is issuing the 2005 Bonds to (i) provide financing for the costs of acquiring, constructing and equipping various improvements and environmental upgrades to the City's water treatment, distribution and storage facilities, including the design costs associated with such improvements, (ii) redeem the City's \$17,000,000 Water Revenue Bond Anticipation Notes, Series 2004 (the "Bond Anticipation Notes") due on June 29, 2005 prior to their maturity, (iii) pay the premium on the bond insurance policy obtained for the 2005 Bonds, (iv) pay the premium on any surety bond obtained to satisfy the debt service reserve requirement for the 2005 Bonds, and (v) pay issuance costs of the 2005 Bonds. For the findings of engineering and financial studies relating to the capital projects and the issuance of the 2005 Bonds, see Appendix A which includes the Water Utility Revenue Bond Feasibility Study prepared by HDR/EES, the City's Consulting Engineer, dated March 9, 2005 (the "Feasibility Study").

DESCRIPTION OF THE 2005 BONDS

General

The 2005 Bonds will be dated the date of delivery, and will mature on November 1 in the years and amounts and bear interest at the rates set forth on the inside cover page of this Official Statement. Interest on the 2005 Bonds will be payable semi-annually on May 1 and November 1 commencing November 1, 2005. The Trustee will act as paying agent for the 2005 Bonds under the Indenture. The 2005 Bonds will be subject to optional and mandatory redemption prior to their stated maturities as described herein.

Book-Entry Only System

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the 2005 Bonds. The 2005 Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee). One fully-registered certificate will be issued for each maturity of the 2005 Bonds and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds securities that its participants ("Participants") deposit with DTC. DTC also facilitates the settlement among Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized bookentry changes in Participants' accounts, thereby eliminating the need for physical movement of securities certificates. "Direct Participants" include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is owned by a number of its Direct Participants and by the New York Stock Exchange, Inc., the American Stock Exchange, Inc., and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as securities brokers and dealers, banks, and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants," and collectively referred to herein as "Participants"). The rules applicable to DTC and its Participants are on file with the Securities and Exchange Commission.

Purchases of 2005 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2005 Bonds on DTC's records. The ownership interest of each actual purchaser of the 2005 Bonds ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2005 Bonds are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the 2005 Bonds, except in the event that use of the book-entry system for the 2005 Bonds is discontinued.

To facilitate subsequent transfers, all 2005 Bonds deposited by Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. The deposit of 2005 Bonds with DTC and their registration in the name of Cede & Co. effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2005 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts the 2005 Bonds are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to Cede & Co. if less than all of the 2005 Bonds within a maturity are redeemed, DTC's practice is to determine by lot the amount of the 2005 Bonds of each Direct Participant in such maturity to be refunded.

Neither DTC nor Cede & Co. will consent or vote with respect to the 2005 Bonds. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2005 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, premium and interest payments on the 2005 Bonds will be made to DTC. DTC's practice is to credit Direct Participants' accounts on the payable date in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on the payable date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to DTC is the responsibility of the City, disbursement of payments to Direct Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the 2005 Bonds at any time by giving reasonable notice to the City. Under such circumstances in the event that a successor securities depository is not obtained, certificates for the 2005 Bonds are required to be printed and delivered by the City.

The City may decide to replace DTC with a successor securities depository or to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In the event that the book-entry system is discontinued, certificates for the 2005 Bonds will be printed and delivered by the City.

The information in this section concerning DTC and DTC's book-entry only system has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for the accuracy thereof.

The City and the Trustee have no responsibility or obligation to the Direct Participants, the Indirect Participants or the Beneficial Owners with respect to (i) the accuracy of any records maintained by DTC, any Direct Participant or any Indirect Participant; (ii) the payment by any Direct Participant or any Indirect Participant of any amount due to any Beneficial Owner in respect of the principal of, premium, if any, and interest on the 2005 Bonds; (iii) the delivery or timeliness of delivery by DTC, any Direct Participant or any Indirect Participant of any notice to any Beneficial Owner which is required or permitted under the terms of the Indenture to be given to owners of the 2005 Bonds; (iv) the selection of the Beneficial Owners to receive payment in the event of any partial redemption of the 2005 Bonds; or (v) any consent given or other action taken by DTC, or its nominee, Cede & Co., as bondowner.

Redemption

Optional. The 2005 Bonds maturing on or before November 1, 2015, are not subject to optional redemption before maturity. The 2005 Bonds maturing on or after November 1, 2016, are subject to optional redemption prior to their respective maturities on or after November 1, 2015, at the option of the City, in whole or in part (in increments of \$5,000) at any time, at par plus the interest accrued on the principal amount to be redeemed to the date fixed for redemption.

Mandatory. The 2005 Bonds maturing on November 1, 2035, are subject to mandatory redemption prior to maturity beginning November 1, 2032, and annually on each November 1, thereafter, in the years and at the principal amounts set forth below at a redemption price equal to 100% of the principal amount to be redeemed, plus accrued interest to the date of redemption:

2005 Bonds Due November 1, 2035

<u>Year</u>	
(November 1)	Amount
2032	\$1,185,000
2033	\$1,240,000
2034	\$1,300,000
2035	\$1,365,000

Notice. Any redemption of the 2005 Bonds is required by the Indenture to be made upon notice of redemption given by certified mail to DTC or, if the book-entry only system is discontinued as described above, by first class mail, postage prepaid, not less than 30 nor more than 60 days before the date fixed for redemption, to the registered owners of the 2005 Bonds to be redeemed and to certain national information services whose names and addresses are included in the most recent list furnished to the Trustee by the City, as set forth in the Indenture.

Each notice of redemption will contain, among other things, the CUSIP identification number and the number of the 2005 Bonds (or portions thereof) being called for redemption, the redemption date and price and the address at which the 2005 Bonds are to be surrendered for payment of the redemption price. Any defect in such notice or the failure to mail any such notice to the registered owner of any 2005 Bond called for redemption will not affect the validity of the proceedings for the redemption of any other 2005 Bond. Any defect in such notice or the failure to mail any such notice to any such national information service will not affect the validity of the proceedings for the redemption of the 2005 Bonds. As long as the book-entry only system is used for determining ownership of the 2005 Bonds, the City shall send notice to DTC or its nominee, or its successor. Any failure of DTC or its nominee or of a Direct Participant or Indirect Participant to notify a Direct Participant, Indirect Participant or Beneficial Owner of any 2005 Bond called for redemption will not affect the validity of the proceedings for the redemption of such 2005 Bond.

SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

Pledge Under the Indenture

The 1993 Bonds, the 1995 Bonds, the 1998 Bonds, the 2001 Bonds, the 2005 Bonds and any Additional Bonds issued under the Indenture (collectively, the "Bonds") are limited obligations of the City payable from Net Revenues and reserves held for such purpose. The term "Net Revenues" is defined in the Indenture as Revenues less Operating Expenses. As defined in the Indenture, "Revenues" include all revenues, receipts and other income derived by the City from the ownership or operation of the System including, without limitation, investment earnings and transfers, if any, from the Rate Stabilization Fund, but excluding (i) any gift, grant or contribution to the extent restricted by the donor or grantor to a particular purpose inconsistent with its use for the payment of debt service on Bonds, Parity Indebtedness or Subordinate Debt, (ii) proceeds derived from insurance or condemnation and (iii) any transfers from the Revenue Fund to the Rate Stabilization Fund. "Operating Expenses," as defined in the Indenture, include all current expenses directly or indirectly attributable to the ownership or operation of the System, but do not include (i) any allowance for amortization or depreciation, (ii) deposits or transfers to the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund, the Repair and Replacement Reserve Fund or the Rate Stabilization Fund, (iii) payments for Existing Debt Service on City Obligations and (iv) expenditures which the City makes an election to capitalize.

The City may incur "Parity Indebtedness" equally and ratably secured by Net Revenues with the Bonds on terms and conditions similar to those required for the issuance of Additional Bonds. Parity Debt Service is not secured by the Debt Service Reserve Fund. The City also may issue "Subordinate Debt" secured by a pledge of Net Revenues that is expressly made subordinate to the pledge of Net Revenues securing Bonds or Parity Indebtedness or which is unsecured.

The City has entered into wholesale contracts with the U.S. Navy and the Cities of Virginia Beach, Chesapeake, and Portsmouth. Payments received by the City under these contracts constitute Revenues. See the section entitled "THE SYSTEM - Wholesale Contracts" and Appendix E, "SUMMARY OF NORFOLK-VIRGINIA BEACH WATER SERVICES CONTRACT," for a more detailed discussion of these contracts.

Neither the faith and credit of the Commonwealth of Virginia nor the faith and credit of any county, city, town or other political subdivision of the Commonwealth of Virginia, including the City, is pledged to the payment of the principal of, premium, if any, or interest on the 2005 Bonds.

Revenue Covenant

The City has covenanted in the Indenture that it will establish, fix, charge and collect rates, fees and other charges for the use of and for the services furnished by the System, and will, from time to time and as often as appears necessary, revise such rates, fees and other charges, so that in each fiscal year, Net Revenues are not less than the greater of (i) the sum of 1.1 times debt service on Bonds and Parity Indebtedness and 1.0 times debt service on Subordinated Debt for the fiscal year and (ii) 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund and the Repair and Replacement Reserve Fund (the "Revenue Covenant").

Additional Bonds and Parity Indebtedness

The City may issue Additional Bonds or Parity Indebtedness upon receipt of a written certificate of the Director of Finance or, at the City's option, the Consulting Engineer which states that the amount of the Net Revenues as received during any twelve consecutive months of the twenty-four months immediately preceding the issuance of the Bonds or Parity Indebtedness (the "Test Period"), as adjusted as set forth below, will satisfy the Revenue Covenant for the Test Period taking into account the maximum annual debt service due on (i) the Bonds and Parity Indebtedness then outstanding and (ii) the Bonds or Parity Indebtedness to be issued. The Net Revenues which are permitted to be certified by the Director of Utilities or the Consulting Engineer to the Director of Finance may be adjusted as follows:

- (a) If the City has increased the rates, fees or other charges for the services or use of the System, the Net Revenues for the Test Period will be adjusted to include the Net Revenues which would have been derived from the System during the Test Period as if such increased rates, fees or other charges for the services or use of the System had been in effect during the Test Period.
- (b) If the City has acquired or has contracted to acquire any privately or publicly-owned existing water system, sewer system, sewage disposal system, solid waste collection or disposal system, stormwater collection or disposal system, or any other utility system that the City will consolidate with the System, the cost of which will be paid from all or part of the proceeds of the issuance of the proposed Bonds or Parity Indebtedness, then the Net Revenues derived from the System during the Test Period will be increased by adding to the Net Revenues for the Test Period the projected Net Revenues which would have been derived from the System if such utility system had been operated by the City as part of the System during the Test Period.
- (c) If the City has entered into a contract on or before the date of the issuance of the proposed Bonds or Parity Indebtedness with any public body whereby the City has agreed to furnish services consistent with the services performed by the System, which contract (i) is for a duration of not less than the final maturity of the Bonds or Parity Indebtedness proposed to be issued, or (ii) if less than the final maturity of such Bonds or Parity Indebtedness, contains provisions obligating the party contracting with the City to pay in full its allocated share of capital improvements to the System needed to carry out the terms of the contract, then the Net Revenues of the System during the Test Period will be increased by the least amount which the entity receiving such services will be required to pay by the terms of the contract in any one year during which the City is to furnish such services and such Bonds or Parity Indebtedness are anticipated to be outstanding, after deducting from such payment the estimated amount of operating expenses and repair, renewal and replacement costs attributable in such year to such services.
- (d) If there is an estimated increase in Revenues to be received by the City, as a result of additions, extensions or improvements to the System within three years after delivery of the proposed Bonds or Parity Indebtedness and the governing body of the City has taken official action authorizing the additions, extensions or improvements (and if the project involves another jurisdiction, the governing body of that jurisdiction has given appropriate approval), then the Net Revenues derived from the System during the Test Period will be increased by the average annual additional Net Revenues estimated for the first two full Fiscal Years after such additions, extensions or improvements are placed in service.

Debt Service Reserve Fund

The Bonds will be additionally secured by a Debt Service Reserve Fund established and maintained pursuant to the Indenture and held by the Trustee. The Indenture requires that the City must maintain on deposit in the Debt Service Reserve Fund an amount equal to the lesser of (i) the maximum principal and interest due on the Bonds then Outstanding in the current or any future fiscal year and (ii) 125 percent of the average annual principal and interest due on the Bonds then Outstanding in the then current and each future fiscal year (the "Debt Service Reserve Requirement"); provided, however, for any series of Bonds, the amount required to be deposited to and maintained in the Debt Service Reserve Fund with respect to such series of Bonds will not exceed the amount which is

permitted by the Internal Revenue Code to be applied from the proceeds of such series of Bonds and still maintain the exclusion of interest on such series of Bonds from gross income for purposes of federal income taxation. **Amounts in the Debt Service Reserve Fund equally and ratably secure the Bonds but do not secure Parity Indebtedness.** The deposit to the Debt Service Reserve Fund required as a result of the issuance of the 2005 Bonds will be provided through the delivery to the Trustee of a surety bond to be issued by MBIA Insurance Corporation. See "DEBT SERVICE RESERVE FUND SURETY BOND" and Appendix I.

Other Debt

The City has issued general obligation bonds from time to time to pay for improvements to the System. The City anticipates that transfers described in the following section will be made from the General Reserve Fund to the City's debt service fund to pay the debt service on such general obligation bonds. The City expects that future capital costs for the System which are financed with debt will be paid from proceeds of Bonds issued pursuant to the Indenture. Since Fiscal Year 1980, the year in which the Water Utility Fund was first operated as a self-supporting enterprise fund, all debt service on general obligation bonds attributable to the System has been paid from revenues of the System. As of June 30, 2004, \$30,320,733 of general obligation bonds attributable to the System were outstanding of which \$4,967,265 of principal is scheduled to be paid during Fiscal Year 2005. The final payment on such general obligation bonds is due in Fiscal Year 2015.

Flow of Funds

The Indenture provides that the City will collect and deposit in the Revenue Fund as received all Revenues derived from the ownership or operation of the System, except as otherwise provided for in the Indenture for investment income on certain funds and accounts created by the Indenture. Not later than the fifth business day before the end of each month, the City will make transfers from the Revenue Fund in the following order of priority:

Operating Fund. An amount such that the balance on deposit in the Operating Fund will be equal to not less than one-sixth of the Operating Expenses to be paid from the Operating Fund in the then current fiscal year as set forth in the annual budget for the System.

Bond Fund. The amount necessary to make the following deposits:

- (a) Interest Account. An approximately equal amount each month such that (after taking into consideration with respect to each series of Bonds the amount then on deposit in the Interest Account, any amount to be transferred from the Capitalized Interest Account to the Interest Account pursuant to the terms of any Supplemental Indenture and any amounts to be drawn or paid under any Credit Facility or Hedge Agreement for deposit to the Account), on the fifth business day immediately preceding the next interest payment date for each series of Bonds, there will be on deposit in the Interest Account an amount equal to the interest on the Outstanding Bonds of each Series to become due on such Interest Payment Date.
- (b) *Principal Account*. An approximately equal amount each month such that (after taking into consideration with respect to each series of Bonds the amount then on deposit in the Principal Account and any amounts to be drawn or paid under any Credit Facility or Hedge Agreement for deposit to the Account), on the fifth business day immediately preceding the next principal payment date for each series of Bonds, there will be on deposit in the Principal Account an amount equal to the principal and accreted value of the Outstanding Bonds of each series maturing or required to be redeemed on such principal payment date.

Parity Debt Service Fund. An amount with respect to any Parity Indebtedness such that (after taking into consideration the amount then on deposit in the Fund and any amounts to be drawn or paid under any Credit Facility or Hedge Agreement for deposit to the Fund) if the same amount is transferred to the Fund each month preceding the next ensuing interest payment date or principal payment date for the Parity Indebtedness, there will be on deposit in the Fund an amount equal to the payment due on the Parity Indebtedness on such payment date.

Debt Service Reserve Fund. If the amount in the Debt Service Reserve Fund is less than the Debt Service Reserve Requirement, the amount of money remaining in the Revenue Fund necessary to increase the amount on deposit in the Debt Service Reserve Fund to the Debt Service Reserve Requirement, or all of the money remaining if less than the amount necessary.

Subordinate Debt Service Fund. Such amount with respect to any Subordinate Debt as may be determined by the City to be necessary to provide for the payment when due of the principal of and interest on the Subordinate Debt.

Repair and Replacement Reserve Fund. The amounts necessary to bring the balance in the Repair and Replacement Reserve Fund to the Replacement Reserve Requirement in not more than (i) thirty-six approximately

equal monthly installments for the initial Requirement and (ii) sixty approximately equal monthly installments in the case the Requirement is increased or moneys are withdrawn from the Fund. The "Replacement Reserve Requirement" was initially established at \$1,000,000. The current Replacement Reserve Requirement is \$1,000,000. The current balance in the Repair and Replacement Reserve Fund is \$2,000,000. The City will review the adequacy of the amount of the Requirement and may increase or reduce (but not below the initial Requirement) such amount. Balances in the Repair and Replacement Reserve Fund may be used to pay for major repairs, additions and other capital improvements to the System and to make deposits to the Revenue Fund, Operating Fund, Bond Fund, Parity Debt Service Fund and Debt Service Reserve Fund.

Rate Stabilization Fund. The amounts necessary to bring the balance in the Rate Stabilization Fund to the Rate Stabilization Requirement in not more than twenty-four equal monthly installments. The City will review the adequacy of the amount of the Requirement and may adjust the Requirement at any time as it deems appropriate. Balances in the Rate Stabilization Fund may be transferred to the Operating Fund and will constitute Revenues. The City is not required to maintain any balance in the Rate Stabilization Fund.

General Reserve Fund. Any balance remaining in the Revenue Fund, after making the above deposits, will be deposited in the General Reserve Fund. Balances in the General Reserve Fund are not pledged to secure Bonds or Parity Indebtedness and may be used by the City for any lawful purpose. The City agrees to use amounts in the General Reserve Fund to cure any deficiency in the Operating Fund, the Bond Fund, the Parity Debt Service Fund and the Debt Service Reserve Fund. The City anticipates transferring from the General Reserve Fund to the City's general fund an amount equal to the sum of (i) debt service on general obligation bonds of the City issued to pay costs of the System, (ii) a payment in lieu of taxes and (iii) a return to the City for its investment in the System. These transfers to the City's general fund are not required by the Indenture.

In the event there are insufficient funds in the Revenue Fund to make the transfers required by the Bond Fund and the Parity Debt Service Fund, the City will allocate the available funds between the Bond Fund and the Parity Debt Service Fund in the proportion that the amount required to be deposited to each Fund bears to the total amount required to be deposited to both Funds.

See "DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE," included as Appendix C to this Official Statement for a further description of the flow of funds.

Limits on Enforceability

The enforceability of the Indenture and the 2005 Bonds is subject to bankruptcy, insolvency, moratorium, reorganization and other state and federal laws affecting the enforcement of creditors' rights and to the extent that certain remedies under such agreements or instruments require, or may require, enforcement by a court, such principles of equity as the court having jurisdiction may impose. See "DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE - Events of Default, Remedies; Rights of Bondholders" included in Appendix C to this Official Statement.

Chapter 9 of the United States Bankruptcy Code (the "Bankruptcy Code") permits a municipality such as the City, if insolvent or otherwise unable to pay its debts as they become due, to file a voluntary petition for the adjustment of debts provided that such municipality is "specifically authorized, in its capacity as a municipality or by name, to be a debtor..." Bankruptcy Code, §109(c)(2). Current Virginia statutes do not expressly authorize the City or municipalities generally to file under Chapter 9. Chapter 9 does not authorize the filing of involuntary petitions against municipalities such as the City.

Bankruptcy proceedings by the City could have adverse effects on holders of the 2005 Bonds, including (i) delay in the enforcement of their remedies, (ii) subordination of their claims to claims of those supplying goods and services to the City after the initiation of bankruptcy proceedings and to the administrative expenses of bankruptcy proceedings and (iii) imposition without their consent of a plan of reorganization reducing or delaying payment of the 2005 Bonds. The Bankruptcy Code contains provisions intended to ensure that, in any plan of reorganization not accepted by at least a majority of any class of creditors such as the holders of the 2005 Bonds, such class of creditors will have the benefit of their original claim or its "indubitable equivalent," although such "equivalent" may not provide for payment of the 2005 Bonds in full. The effect of these and other provisions of the Bankruptcy Code cannot be predicted and may be significantly affected by judicial interpretation.

Exclusion Under Uniform Commercial Code Article 9

Legislation adopted in the 2000 Session of the Virginia General Assembly (the "General Assembly") changed Virginia's Uniform Commercial Code, Title 8.9 of the Code of Virginia of 1950, as amended ("UCC"), by bringing previously exempt municipal transactions within the purview of Article 9 of the UCC. This legislation had an effective date of July 1, 2004.

In the 2004 Session, the General Assembly enacted Chapter 296 of the 2004 Acts of Assembly, which adopted curative language reinstating the exclusion of governmental liens on revenues and other governmental assets from Article 9. The curative language provides the following:

- 1. Section 109 of UCC Article 9 excludes from the scope of Article 9: "a sale of promissory notes by the Commonwealth or a governmental unit of the Commonwealth in connection with or in furtherance of the exercise of the borrowing power of the Commonwealth or a governmental unit of the Commonwealth."
- 2. Section 2.1-304.1:2 of the Code of Virginia of 1950, as amended, provides that, except for security interests in goods or software, any security interests granted by the Commonwealth or a governmental unit of the Commonwealth to pay or secure any indebtedness is effective immediately without delivery, filing or other act. The lien of such security interest has priority over any other obligations of the governmental unit.
- 3. Section 703 of UCC Article 9 provides that security interests granted by the Commonwealth or a governmental unit before July 1, 2004 shall continue to be enforceable and maintain their priority effective as of before July 1, 2004.

Chapter 296 was enacted by the General Assembly and approved by the Governor on March 15, 2004 and was effective upon adoption.

THE MBIA INSURANCE POLICY

The MBIA Insurance Corporation Insurance Policy

The following information has been furnished by MBIA Insurance Corporation ("MBIA") for use in this Official Statement. Reference is made to Appendix H for a specimen of MBIA's policy.

The MBIA Policy unconditionally and irrevocably guarantees the full and complete payment required to be made by or on behalf of the Company to the Paying Agent or its successor of an amount equal to (i) the principal of (either at the stated maturity or by an advancement of maturity pursuant to a mandatory sinking fund payment) and interest on, the 2005 Bonds as such payments shall become due but shall not be so paid (except that in the event of any acceleration of the due date of such principal by reason of mandatory or optional redemption or acceleration resulting from default or otherwise, other than any advancement of maturity pursuant to a mandatory sinking fund payment, the payments guaranteed by the MBIA Policy shall be made in such amounts and at such times as such payments of principal would have been due had there not been any such acceleration, unless MBIA elects in its sole discretion, to pay in whole or in part any principal due by reason of such acceleration); and (ii) the reimbursement of any such payment which is subsequently recovered from any Owner of the 2005 Bonds pursuant to a final judgment by a court of competent jurisdiction that such payment constitutes an avoidable preference to such Owner within the meaning of any applicable bankruptcy law (a "Preference").

The MBIA Policy does not insure against loss of any prepayment premium which may at any time be payable with respect to any 2005 Bonds. The MBIA Policy does not, under any circumstance, insure against loss relating to: (i) optional or mandatory redemptions (other than mandatory sinking fund redemptions); (ii) any payments to be made on an accelerated basis; (iii) payments of the purchase price of the 2005 Bonds upon tender by an owner thereof; or (iv) any Preference relating to (i) through (iii) above. The MBIA Policy also does not insure against nonpayment of principal of or interest on the 2005 Bonds resulting from the insolvency, negligence or any other act or omission of the Paying Agent or any other paying agent for the 2005 Bonds.

Upon receipt of telephonic or telegraphic notice, such notice subsequently confirmed in writing by registered or certified mail, or upon receipt of written notice by registered or certified mail, by MBIA from the Paying Agent or any owner of a 2005 Bond the payment of an insured amount for which is then due, that such required payment has not been made, MBIA on the due date of such payment or within one business day after receipt of notice of such nonpayment, whichever is later, will make a deposit of funds, in an account with U.S. Bank Trust National Association,

in New York, New York, or its successor, sufficient for the payment of any such insured amounts which are then due. Upon presentment and surrender of such 2005 Bonds or presentment of such other proof of ownership of the 2005 Bonds, together with any appropriate instruments of assignment to evidence the assignment of the insured amounts due on the 2005 Bonds as are paid by MBIA, and appropriate instruments to effect the appointment of MBIA as agent for such owners of the 2005 Bonds in any legal proceeding related to payment of insured amounts on the 2005 Bonds, such instruments being in a form satisfactory to U.S. Bank Trust National Association, U.S. Bank Trust National Association shall disburse to such owners or the Paying Agent payment of the insured amounts due on such 2005 Bonds, less any amount held by the Paying Agent for the payment of such insured amounts and legally available therefor.

MBIA

MBIA Insurance Corporation ("MBIA") is the principal operating subsidiary of MBIA Inc., a New York Stock Exchange listed company (the "Company"). The Company is not obligated to pay the debts of or claims against MBIA. MBIA is domiciled in the State of New York and licensed to do business in and subject to regulation under the laws of all 50 states, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, the Virgin Islands of the United States and the Territory of Guam. MBIA has three branches, one in the Republic of France, one in the Republic of Singapore and one in the Kingdom of Spain. New York has laws prescribing minimum capital requirements, limiting classes and concentrations of investments and requiring the approval of policy rates and forms. State laws also regulate the amount of both the aggregate and individual risks that may be insured, the payment of dividends by MBIA, changes in control and transactions among affiliates. Additionally, MBIA is required to maintain contingency reserves on its liabilities in certain amounts and for certain periods of time.

MBIA does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding the policy and MBIA set forth under the heading "The MBIA Insurance Policy". Additionally, MBIA makes no representation regarding the Bonds or the advisability of investing in the Bonds.

The Financial Guarantee Insurance Policies are not covered by the Property/Casualty Insurance Security Fund specified in Article 76 of the New York Insurance Law.

MBIA Information

The following documents filed by the Company with the Securities and Exchange Commission (the "SEC") are incorporated herein by reference:

- (1) The Company's Annual Report on Form 10-K for the year ended December 31, 2003; and
- (2) The Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.

Any documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act of 1934, as amended, after the date of the Company's most recent Quarterly Report on form 10-Q, and prior to the termination of the offering of the Bonds offered hereby shall be deemed to be incorporated by reference in this Official Statement and to be a part hereof. Any statement contained in a document incorporated or deemed to be incorporated by reference herein, or contained in this Official Statement, shall be deemed to be modified or superseded for purposes of this Official Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Official Statement.

The Company files annual, quarterly and special reports, information statements and other information with the SEC under File No. 1-9583. Copies of the SEC filings (including (1) the Company's Annual Report on Form 10-K for the year ended December 31, 2003, and (2) the Company's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2004, June 30, 2004 and September 30, 2004) are available (i) over the Internet at the SEC's web site at http://www.sec.gov; (ii) at the SEC's public reference room in Washington D.C.; (iii) over the Internet at the Company's web site at http://www.mbia.com; and (iv) at no cost, upon request to MBIA Insurance Corporation, 113 King Street, Armonk, New York 10504. The telephone number of MBIA is (914) 273-4545.

As of December 31, 2003, MBIA had admitted assets of \$9.9 billion (audited), total liabilities of \$6.2 billion (audited), and total capital and surplus of \$3.7 billion (audited) determined in accordance with statutory accounting practices prescribed or permitted by insurance regulatory authorities. As of September 30, 2004 MBIA had admitted assets of \$10.4 billion (unaudited), total liabilities of \$6.7 billion (unaudited), and total capital and surplus of \$3.7 billion (unaudited) determined in accordance with statutory accounting practices prescribed or permitted by insurance regulatory authorities.

Financial Strength Ratings of MBIA

Moody's Investors Service, Inc. rates the financial strength of MBIA "Aaa."

Standard & Poor's, a division of The McGraw-Hill Companies, Inc. rates the financial strength of MBIA "AAA."

Fitch Ratings rates the financial strength of MBIA "AAA."

Each rating of MBIA should be evaluated independently. The ratings reflect the respective rating agency's current assessment of the creditworthiness of MBIA and its ability to pay claims on its policies of insurance. Any further explanation as to the significance of the above ratings may be obtained only from the applicable rating agency.

The above ratings are not recommendations to buy, sell or hold the 2005 Bonds, and such ratings may be subject to revision or withdrawal at any time by the rating agencies. Any downward revision or withdrawal of any of the above ratings may have an adverse effect on the market price of the 2005 Bonds. MBIA does not guaranty the market price of the 2005 Bonds nor does it guaranty that the ratings on the 2005 Bonds will not be revised or withdrawn.

DEBT SERVICE RESERVE FUND SURETY BOND

The following information has been furnished by MBIA for use in this Official Statement. Reference is made to Appendix I for a specimen of MBIA's Debt Service Reserve Fund Surety Bond.

Application has been made to the MBIA Insurance Corporation (the "Insurer") for a commitment to issue a surety bond (the "Debt Service Reserve Fund Surety Bond"). The Debt Service Reserve Fund Surety Bond will provide that upon notice from the Paying Agent to the Insurer to the effect that insufficient amounts are on deposit in the Bond Fund to pay the principal of (at maturity or pursuant to mandatory redemption requirements) and interest on the 2005 Obligations, the Insurer will promptly deposit with the Paying Agent an amount sufficient to pay the principal of and interest on the 2005 Obligations or the available amount of the Debt Service Reserve Fund Surety Bond, whichever is less. Upon the later of: (i) three (3) days after receipt by the Insurer of a Demand for Payment in the form attached to the Debt Service Reserve Fund Surety Bond, duly executed by the Paying Agent; or (ii) the payment date of the Obligations as specified in the Demand for Payment presented by the Paying Agent to the Insurer, the Insurer will make a deposit of funds in an account with U.S. Bank Trust National Association, in New York, New York, or its successor, sufficient for the payment to the Paying Agent, of amounts which are then due to the Paying Agent (as specified in the Demand for Payment) subject to the Surety Bond Coverage.

The available amount of the Debt Service Reserve Fund Surety Bond is the initial face amount of the Debt Service Reserve Fund Surety Bond less the amount of any previous deposits by the Insurer with the Paying Agent which have not been reimbursed by the City. The City and the Insurer will enter into a Financial Guaranty Agreement dated as of the date of delivery of the 2005 Bonds (the "Agreement"). Pursuant to the Agreement, the City is required to reimburse the Insurer, within one year of any deposit, the amount of such deposit made by the Insurer with the Paying Agent under the Debt Service Reserve Fund Surety Bond. Such reimbursement shall be made only after all required deposits to the Operating Fund and the Bond Fund have been made.

Under the terms of the Agreement, the Paying Agent is required to reimburse the Insurer, with interest, until the face amount of the Debt Service Reserve Fund Surety Bond is reinstated before any deposit is made to the Operating Fund. No optional redemption of Obligations may be made until the Insurer's Debt Service Reserve Fund Surety Bond is reinstated. The Debt Service Reserve Fund Surety Bond will be held by the Paying Agent in the Debt Service Reserve Fund and is provided as an alternative to the City depositing funds equal to the Debt Service Requirement for outstanding Obligations. The Debt Service Reserve Fund Surety Bond will be issued in the face amount equal to the lesser of maximum principal and interest due on the Bonds then Outstanding in the current or any future fiscal year and 125% of the average annual principal and interest due on the Bonds then Outstanding in the then current and each future fiscal year for the Obligations and the premium therefor will be fully paid by the City at the time of delivery of the Obligations.

DEBT SERVICE RESERVE FUND SUBSTITUTION

On or about the date of delivery of the 2005 Bonds, the City expects to substitute the cash on deposit in the Debt Service Reserve Fund with respect to the 1993 Bonds and the 1995 Bonds, respectively, with a Reserve Fund Bond and a Surety Bond, both terms as defined below, in accordance with Section 7.6(d) of the Master Indenture.

Section 7.6(d) of the Master Indenture states that in lieu of maintaining and depositing money or securities in the Debt Service Reserve Fund, the City may deposit with the Trustee a letter of credit, bond insurance policy or

surety bond in the amount equal to all or a portion of the Debt Service Reserve Requirement; provided that the issuer of the letter of credit, bond insurance policy or surety bond, as appropriate, is rated one of the two highest long term debt rating categories by the Rating Agencies then rating the Bonds without regard to refinement or graduation of such rating category by numerical modifier or otherwise.

If the City provides the Trustee with a letter of credit, bond insurance policy or surety bond as provided in the Master Indenture, the Trustee will transfer the corresponding amount of funds then on deposit in the Debt Service Reserve Fund to the City, provided the City delivers to the Trustee (i) an opinion of Bond Counsel that such transfer of funds will not adversely affect the exclusion from gross income for purposes of federal income taxation of interest on any Bonds the interest on which was excludable on the date of their issuance and (ii) the City covenants to comply with any directions or restrictions contained in such opinion concerning the use of such funds.

In accordance with the above referenced provisions, the cash on deposit in the Debt Service Reserve Fund with respect to the portion of the Debt Service Reserve Requirement attributable to the 1993 Bonds shall be transferred to the City and replaced with a reserve fund bond (the "Reserve Fund Bond") issued by Ambac Assurance Corporation ("Ambac Assurance") in the amount of \$4,530,171.28. See "1993 Bonds Debt Service Reserve Fund – Ambac Assurance Reserve Fund Bond" below.

In addition, the cash on deposit in the Debt Service Reserve Fund with respect to the portion of the Debt Service Reserve Requirement attributable to the 1995 Bonds shall be transferred to the City and replaced with a surety bond ("Surety Bond") issued by MBIA Insurance Corporation ("MBIA") in the amount of \$8,144,103.75. See "1995 Bonds Debt Service Reserve Fund – MBIA Debt Service Reserve Fund Surety Bond" below.

The issuance of the Reserve Fund Bond and the Surety Bond and the transfer of the amounts in the Debt Service Reserve Fund to the City shall take place on or about the date of delivery of the 2005 Bonds. The City shall use the amounts transferred from the Debt Service Reserve Fund to finance certain capital projects associated with the City's water system capital improvement program.

1993 Bonds Debt Service Reserve Fund — Ambac Assurance Reserve Fund Bond

Application has been made to Ambac Assurance Corporation ("Ambac Assurance") for the issuance of a Reserve Fund Bond for the purpose of funding a portion of the Debt Service Reserve Fund. The premium on the Reserve Fund Bond is to be fully paid at the time of delivery of the Reserve Fund Bond. The Reserve Fund Bond provides that upon the later of (i) one (1) day after receipt by Ambac Assurance of a demand for payment executed by the Trustee certifying that provision for the payment of principal of or interest on the 1993 Bonds when due has not been made or (ii) the interest payment date specified in the Demand for Payment submitted to Ambac Assurance, Ambac Assurance will promptly deposit funds with the Paying Agent sufficient to enable the Paying Agent to make such payments due on the 1993 Bonds, but in no event exceeding the Reserve Fund Bond Coverage, as defined in the Reserve Fund Bond.

Pursuant to the terms of the Reserve Fund Bond, the Reserve Fund Bond Coverage is automatically reduced to the extent of each payment made by Ambac Assurance under the terms of the Reserve Fund Bond and the City is required to reimburse Ambac Assurance for any draws under the Reserve Fund Bond with interest at a market rate. Upon such reimbursement, the Reserve Fund Bond is reinstated to the extent of each principal reimbursement up to but not exceeding the Reserve Fund Bond Coverage. The reimbursement obligation of the City is subordinate to the City's obligations with respect to the 1993 Bonds.

In the event the amount on deposit, or credited to the Debt Service Reserve Fund, exceeds the amount of the Reserve Fund Bond, any draw on the Reserve Fund Bond shall be made only after all the funds in the Debt Service Reserve Fund have been expended. In the event that the amount on deposit in, or credited to, the Debt Service Reserve Fund, in addition to the amount available under the Reserve Fund Bond, includes amounts available under a letter of credit, insurance policy, Reserve Fund Policy or other such funding instrument (the "Additional Funding Instrument"), draws on the Reserve Fund Bond and the Additional Funding Instrument shall be made on a pro rata basis to fund the insufficiency. The Master Indenture provides that the Debt Service Reserve Fund shall be replenished in the following priority: (i) principal and interest on the Reserve Fund Bond and on the Additional Funding Instrument shall be paid from first available Revenues, to the extent and in the manner provided in Section 7.2(a)(4) of the Master Indenture, on a pro rata basis; and (ii) after all such amounts are paid in full, amounts necessary to fund the Debt Service Reserve Fund to the required level, after taking into account the amounts available under the Reserve Fund Bond and the Additional Funding Instrument shall be deposited from next available Revenues, to the extent and in the manner provided in Section 7.2(a)(4) of the Master Indenture.

The Reserve Fund Bond does not insure against nonpayment caused by the insolvency or negligence of the Trustee or the Paying Agent.

Ambac Assurance Corporation

Ambac Assurance Corporation ("Ambac Assurance") is a Wisconsin-domiciled stock insurance corporation regulated by the Office of the Commissioner of Insurance of the State of Wisconsin and licensed to do business in 50 states, the District of Columbia, the Territory of Guam, the Commonwealth of Puerto Rico and the U.S. Virgin Islands, with admitted assets of approximately \$8,069,000,000 (unaudited) and statutory capital of approximately \$5,015,000,000 (unaudited) as of September 30, 2004. Statutory capital consists of Ambac Assurance's policyholders' surplus and statutory contingency reserve. Moody's Investors Service, Standard & Poor's Credit Markets Services, a Division of The McGraw-Hill Companies, and Fitch Ratings have each assigned a triple-A financial strength rating to Ambac Assurance.

Ambac Assurance has obtained a ruling from the Internal Revenue Service to the effect that the insuring of an obligation by Ambac Assurance will not affect the treatment for federal income tax purposes of interest on such obligation and that insurance proceeds representing maturing interest paid by Ambac Assurance under policy provisions substantially identical to those contained in its [Financial Guaranty insurance policy] shall be treated for federal income tax purposes in the same manner as if such payments were made by the City of the [1993 Bonds].

Ambac Assurance makes no representation regarding the 1993 Bonds or the 2005 Bonds or the advisability of investing in the 1993 Bonds or the 2005 Bonds and makes no representation regarding, nor has it participated in the preparation of, the Official Statement other than the information supplied by Ambac Assurance and presented under the heading "DEBT SERVICE RESERVE FUND SUBSTITUTION – 1993 BONDS DEBT SERVICE RESERVE FUND – AMBAC ASSURANCE RESERVE FUND BOND".

Available Information

The parent company of Ambac Assurance, Ambac Financial Group, Inc. (the "Company"), is subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC"). These reports, proxy statements and other information can be read and copied at the SEC's public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC maintains an internet site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding companies that file electronically with the SEC, including the Company. These reports, proxy statements and other information can also be read at the offices of the New York Stock Exchange, Inc. (the "NYSE"), 20 Broad Street, New York, New York 10005.

Copies of Ambac Assurance's financial statements prepared in accordance with statutory accounting standards are available from Ambac Assurance. The address of Ambac Assurance's administrative offices and its telephone number are One State Street Plaza, 19th Floor, New York, New York, 10004 and (212) 668-0340.

Incorporation of Certain Documents by Reference

The following documents filed by the Company with the SEC (File No. 1-10777) are incorporated by reference in this Official Statement:

- 1. The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003 and filed on March 15, 2004;
- 2. The Company's Current Report on Form 8-K dated April 21, 2004 and filed on April 22, 2004;
- 3. The Company's Quarterly Report on Form 10-Q for the fiscal quarterly period ended March 31, 2004 and filed on May 10, 2004;
- 4. The Company's Current Report on Form 8-K dated July 21, 2004 and filed on July 22, 2004;
- 5. The Company's Quarterly Report on Form 10-Q for the fiscal quarterly period ended June 30, 2004 and filed on August 9, 2004;
- 6. The Company's Current Report on Form 8-K dated August 19, 2004 and filed on August 20, 2004;
- 7. The Company's Current Report on Form 8-K dated October 20, 2004 and filed on October 20, 2004;
- 8. The Company's Quarterly Report on Form 10-Q for the fiscal quarterly period ended September 30, 2004 and filed on November 9, 2004;
- 9. The Company's Current Report on Form 8-K dated November 12, 2004 and filed on November 12, 2004; and

10. The Company's Current Report on Form 8-K dated January 26, 2005 and filed on January 26, 2005.

All documents subsequently filed by the Company pursuant to the requirements of the Exchange Act after the date of this Official Statement will be available for inspection in the same manner as described above in "Available Information."

1995 Bonds Debt Service Reserve Fund - MBIA Debt Service Reserve Fund Surety Bond

Application has been made to the MBIA Insurance Corporation (the "Insurer") for a commitment to issue a surety bond (the "Debt Service Reserve Fund Surety Bond"). The Debt Service Reserve Fund Surety Bond will provide that upon notice from the Paying Agent to the Insurer to the effect that insufficient amounts are on deposit in the Bond Fund to pay the principal of (at maturity or pursuant to mandatory redemption requirements) and interest on the 1995 Bonds, the Insurer will promptly deposit with the Paying Agent an amount sufficient to pay the principal of and interest on the 1995 Bonds or the available amount of the Debt Service Reserve Fund Surety Bond, whichever is less. Upon the later of: (i) three (3) days after receipt by the Insurer of a Demand for Payment in the form attached to the Debt Service Reserve Fund Surety Bond, duly executed by the Paying Agent; or (ii) the payment date of the 1995 Bonds as specified in the Demand for Payment presented by the Paying Agent to the Insurer, the Insurer will make a deposit of funds in an account with U.S. Bank Trust National Association, in New York, New York, or its successor, sufficient for the payment to the Paying Agent, of amounts which are then due to the Paying Agent (as specified in the Demand for Payment) subject to the Surety Bond Coverage, as defined in the Debt Service Reserve Fund Surety Bond.

The available amount of the Debt Service Reserve Fund Surety Bond is the initial face amount of the Debt Service Reserve Fund Surety Bond less the amount of any previous deposits by the Insurer with the Paying Agent which have not been reimbursed by the City. The City and the Insurer will enter into a Financial Guaranty Agreement with respect to the 1995 Bonds (the "Agreement"). Pursuant to the Agreement, the City is required to reimburse the Insurer, within one year of any deposit, the amount of such deposit made by the Insurer with the Paying Agent under the Debt Service Reserve Fund Surety Bond. Such reimbursement shall be made only after all required deposits to the Operating Fund, the Bond Fund and the Parity Debt Service Fund have been made.

Under the terms of the Agreement, the Paying Agent is required to reimburse the Insurer, with interest, until the face amount of the Debt Service Reserve Fund Surety Bond is reinstated before any deposit is made to the General Reserve Fund. No optional redemption of the 1995 Bonds may be made until the Insurer's Debt Service Reserve Fund Surety Bond will be held by the Paying Agent in the Debt Service Reserve Fund and is provided as an alternative to the City depositing funds equal to the Debt Service Reserve Requirement attributable to the 1995 Bonds. The Debt Service Reserve Fund Surety Bond will be issued in the face amount equal to the Debt Service Reserve Requirement attributable to the 1995 Bonds and the premium therefor will be fully paid by the City at the time of delivery of the Debt Service Reserve Fund Surety Bond.

MBIA

See "THE MBIA INSURANCE POLICY - MBIA."

MBIA Information

See "THE MBIA INSURANCE POLICY - MBIA Information."

Financial Strength Ratings of MBIA

See "THE MBIA INSURANCE POLICY - Financial Strength Ratings of MBIA."

SOURCES AND USES OF FUNDS

The sources and uses of funds for the 2005 Bonds are as follows:

Sources of Funds:

Sources of 1 unas.	
Par Amount of the 2005 Bonds	\$22,810,000.00
Plus: Net Original Issue Premium	123,973.75
Total Sources of Funds	\$22,933,973.75
Uses of Funds:	
Capital Projects	\$5,425,042.26
Payment of Bond Anticipation Note	17,000,000.00
Underwriters' Discount	114,050.00
Costs of Issuance*	<u>394,881.49</u>
Total Uses of Funds	\$22,933,973.75

^{*} Includes legal, financial advisory, rating, printing, insurance and other costs of issuing the bonds.

DEBT SERVICE REQUIREMENTS

Annual debt service requirements on the outstanding 1993 Bonds, the outstanding 1995 Bonds, the outstanding 1998 Bonds, the outstanding 2001 Bonds and the 2005 Bonds are shown in the table below. Totals may not sum due to rounding.

	Existing Debt ¹ (as of 6/30/2004)				2005 Bonds			Total Debt		
Fiscal Year			ŕ							
Ending June 30	<u>Principal</u>	Interest	<u>Total</u>	<u>Principal</u>	Interest	<u>Total</u>	<u>Principal</u>	Interest	Total	
2005	\$6,250,000	\$14,041,059	\$20,291,059	\$ -	\$ -	\$ -	\$6,250,000	\$14,041,059	\$20,291,059	
2006	6,580,000	13,713,374	20,293,374	-	1,114,587	1,114,587	6,580,000	14,827,961	21,407,961	
2007	6,915,000	13,378,564	20,293,564	395,000	1,001,256	1,396,256	7,310,000	14,379,820	21,689,820	
2008	7,255,000	13,035,031	20,290,031	410,000	987,169	1,397,169	7,665,000	14,022,200	21,687,200	
2009	7,630,000	12,667,225	20,297,225	420,000	972,644	1,392,644	8,050,000	13,639,869	21,689,869	
2010	8,020,000	12,275,249	20,295,249	435,000	957,681	1,392,681	8,455,000	13,232,930	21,687,930	
2011	8,430,000	11,858,191	20,288,191	455,000	942,106	1,397,106	8,885,000	12,800,297	21,685,297	
2012	8,885,000	11,410,328	20,295,328	470,000	925,919	1,395,919	9,355,000	12,336,247	21,691,247	
2013	9,360,000	10,931,016	20,291,016	485,000	909,206	1,394,206	9,845,000	11,840,222	21,685,222	
2014	9,870,000	10,423,766	20,293,766	500,000	891,969	1,391,969	10,370,000	11,315,735	21,685,735	
2015	10,410,000	9,886,404	20,296,404	520,000	873,794	1,393,794	10,930,000	10,760,198	21,690,198	
2016	10,980,000	9,313,676	20,293,676	540,000	853,569	1,393,569	11,520,000	10,167,245	21,687,245	
2017	11,585,000	8,705,573	20,290,573	565,000	828,644	1,393,644	12,150,000	9,534,217	21,684,217	
2018	12,225,000	8,064,079	20,289,079	595,000	799,644	1,394,644	12,820,000	8,863,723	21,683,723	
2019	12,905,000	7,386,763	20,291,763	620,000	772,369	1,392,369	13,525,000	8,159,132	21,684,132	
2020	13,625,000	6,665,226	20,290,226	645,000	747,069	1,392,069	14,270,000	7,412,295	21,682,295	
2021	14,395,000	5,898,269	20,293,269	675,000	718,138	1,393,138	15,070,000	6,616,407	21,686,407	
2022	15,205,000	5,087,008	20,292,008	705,000	685,363	1,390,363	15,910,000	5,772,371	21,682,371	
2023	16,070,000	4,227,221	20,297,221	745,000	650,925	1,395,925	16,815,000	4,878,146	21,693,146	
2024	16,980,000	3,318,433	20,298,433	780,000	614,706	1,394,706	17,760,000	3,933,139	21,693,139	
2025	13,285,000	2,483,109	15,768,109	820,000	576,706	1,396,706	14,105,000	3,059,815	17,164,815	
2026	14,040,000	1,727,320	15,767,320	860,000	536,806	1,396,806	14,900,000	2,264,126	17,164,126	
2027	6,450,000	1,177,763	7,627,763	895,000	495,125	1,390,125	7,345,000	1,672,888	9,017,888	
2028	6,780,000	842,994	7,622,994	945,000	451,425	1,396,425	7,725,000	1,294,419	9,019,419	
2029	7,135,000	488,678	7,623,678	990,000	406,706	1,396,706	8,125,000	895,384	9,020,384	
2030	1,945,000	258,375	2,203,375	1,035,000	361,144	1,396,144	2,980,000	619,519	3,599,519	
2031	2,045,000	158,625	2,203,625	1,080,000	312,881	1,392,881	3,125,000	471,506	3,596,506	
2032	<u>2,150,000</u>	<u>53,750</u>	2,203,750	1,135,000	261,659	1,396,659	3,285,000	315,409	3,600,409	
2033				1,185,000	208,009	1,393,009	1,185,000	208,009	1,393,009	
2034				1,240,000	151,931	1,391,931	1,240,000	151,931	1,391,931	
2035				1,300,000	93,194	1,393,194	1,300,000	93,194	1,393,194	
2036				<u>1,365,000</u>	<u>31,566</u>	<u>1,396,566</u>	1,365,000	31,566	1,396,566	
	\$267,405,000	<u>\$199,477,066</u>	<u>\$466,882,066</u>	\$22,810,000,	\$20,133,909	\$42,943,909	\$290,215,000	<u>\$219,610,976</u>	\$509,825,976	

Source: Department of Finance.

Does not include the \$17 million outstanding bond anticipation note that is refunded with the 2005 Bonds.

DEPARTMENT OF UTILITIES

Organizational Structure

The Department of Utilities (the "Department") operates and maintains the City's water and wastewater systems and oversees the Water and Wastewater Enterprise Funds. The Water Department Utility Fund currently employs approximately 290 employees who are grouped into seven divisions. A brief description of each division, follows:

Director's Office Responsible for overall administration of the Department, including public

information, human resources and grants management.

Water Production Responsible for operation and maintenance of water treatment plants and

finished water storage facilities. Maintains raw and finished water pump stations and raw water transmission mains. Reviews any encroachments or

activities on the reservoirs.

Water Quality Responsible for assuring that System water continues to meet state and federal

regulations through laboratory analysis and reporting to regulatory agencies.

Manages raw water resources.

Water Distribution Responsible for the maintenance of over 800 miles of water mains. Also

responsible for repair, replacement and installation of fire hydrants and valves and the detection of leaks in the distribution system. Provides routine flushing

of water mains and the installation of service main extensions.

Engineering Responsible for engineering design, construction oversight, contract

management, and capital improvement program development. Also responsible for underground utility identification under the Miss Utility program, and other

engineering functions.

Accounting and Budget Responsible for financial oversight, budgeting and expenditure tracking for all

phases of the utility operations. Coordinates with the City's Finance

Department to maintain consistency in financial reporting and record keeping.

Water Accounts Responsible for handling customer service inquiries concerning billing and

establishment and disconnection of services. Coordinates the reading of meters. Also responsible for billing and collection activities in conjunction with joint

billing arrangement with Hampton Roads Sanitation District.

The City operates under the City Council-Manager form of government. Policymaking and legislative authorities are vested in the governing City Council, which consists of a mayor and six-member council. The council members serve four (4) year staggered terms. The City Council appoints the City Manager. The City Council is the only body with authority to set water rates charged by the City.

Management Personnel

The principal members of the City management team and their experience are as follows:

Regina V.K. Williams, City Manager, assumed the post of Norfolk City Manager in January 1999. Her responsibilities include supervision of the administrative operations of the City and the preparation of its annual budget. She served as City Manager for the City of San Jose, California for five years and previously served as Assistant City Manager for five years. Prior to serving in San Jose, Mrs. Williams was Deputy City Manager and Chief of Staff for the City of Richmond, Virginia. In 1982, Mrs. Williams was appointed by then Virginia Governor Charles Robb as the first female and first African American to be State Director of Personnel and Training. In 1991, she was inducted as a fellow into the National Academy of Public Administration (NAPA). In 1988, Mrs. Williams was elected to a vice-presidency of the Board of Directors for the International City-County Management Association (ICMA). She was awarded designation of manager of the year in September 2002 by ICMA. Mrs. Williams also served as President of the National Forum of Black Public Administrators in 1995-96

and is a founder and former President of the Richmond, Virginia Chapter of the Conference of Minority Public Administrators. She earned her Bachelor of Science Degree from Eastern Michigan University, Ypsilanti, Michigan and a Masters degree in Public Administration from Virginia Commonwealth University, Richmond, Virginia.

- Steven G. de Mik, Director of Finance, commenced his tenure as Director of Finance on September 1, 2000. At the direction of the City Manager, he is responsible for identifying strategic opportunities for the City in the policy areas of taxation, financial management, fiscal policy development and instruction and economic development. In addition, he is responsible for the administration of the financial affairs of the City which include cash management and investments, debt management, financial accounting and reporting, procurement, risk management, and retiree benefits. Mr. de Mik came to the City from Knox County, Tennessee where he served as the Deputy Director of Finance and Administration. His other work experiences include service with the State of Tennessee Comptroller of the Treasury and Chipman and McMurray, Certified Public Accountants. Mr. de Mik earned a Bachelor of Science degree in Accounting and Business Administration from Southwest Baptist University, Bolivar, Missouri. He also is a licensed Certified Public Accountant.
- **Kristen M. Lentz, P.E.,** was appointed Acting Director of Utilities in 2001 and Director of Utilities in 2002. Ms. Lentz is a registered professional engineer and has approximately twenty-six years of professional experience. Prior to her appointment, Ms. Lentz held the positions of Assistant Director of Public Works for the City of Norfolk for nine years and has served as City Engineer and Director of Engineering and Utilities for the City of Poquoson, Virginia. She holds a Bachelor of Science degree in Civil Engineering from Old Dominion University. She also serves on the Old Dominion University Civil and Environmental Engineering Visiting Council.
- **Stephanie M. Tinsley, CPA**, began serving as the Assistant Director of Utilities in November 2004. Ms. Tinsley is a licensed Certified Public Accountant and has over twelve years of professional experience. She previously held positions as the Manager of Budget and Accounting for the City of Norfolk's Public Works Department, Director of Finance and Administration for the Chesapeake Redevelopment and Housing Authority, and several managerial positions in the private sector. She holds a Master of Business Administration from the College of William and Mary.
- **Peter S. Fortin, P.E.,** has served as the Department's Engineering Manager since 1987. Mr. Fortin is a registered professional engineer and has approximately twenty-seven years of professional experience. He has previously held positions as Vice President of Operations at Silcock Engineering, Engineering Manager for the City of Houston's Water and Wastewater Systems and Operations Manager for the City of Houston's Water System. He holds a Bachelor of Science degree in Civil Engineering from the University of Massachusetts, Lowell, Massachusetts.
- **Vernon R. Land** has served as the Department's Water Quality Manager since 1991. Mr. Land previously served as a Bacteriologist and Water Chemist II, and has been with the Department since 1981. He holds a Bachelor of Science degree in Biology from Old Dominion University. Mr. Land has served on the Virginia American Waterworks Association Water Quality Committee and has completed training in bacteriological laboratory analysis and water plant operations.
- **Richard M. Saul** has served as the Department's Water Production Manager since 1989. Mr. Saul previously served as a Water Chemist and Senior Water Chemist and has been with the Department since 1976. He holds a Bachelor of Science degree in Chemistry and a Master of Science Degree in Civil Engineering from Old Dominion University. Mr. Saul also has received training in Water Utility Vulnerability Assessments and Response and Preparation for Terrorism and Weapons of Mass Destruction.
- **Eric G. Tucker** was appointed the Department's Operation Manager in September 2002. Mr. Tucker has over twenty years of professional experience and held management positions with PEMCCO, Incorporated, Thyssen Elevator Company and URS and engineering positions with Camp Dresser & McKee and CDI Marine Company. Mr. Tucker holds a Bachelor of Science Degree from Virginia State University in Industrial Technology and a Master of Business Administration degree from Averett University in Danville, Virginia.
- **Dwayne H. Coston, CPA**, the Department's Manager of Budget and Accounting, has worked for the Department since 1993. Prior to his appointment as Manager of Budget and Accounting in July 2000, Mr. Coston served as Utility Supervising Accountant and acting Enterprise Controller. He has approximately twenty years of professional experience in public and private accounting and has held managerial positions in the health care and construction industries. He holds a Bachelor of Science degree in Accounting from Norfolk State University, Norfolk Virginia, and is a licensed Certified Public Accountant.
- **J. Nicole Riddick** began serving as Customer Service Manager in March 2001. Ms. Riddick has over fifteen years of professional experience and held management positions as a Customer Service Supervisor and Project

Manager at QVC, Customer Relations Supervisor at Canon ITS, and Customer Dispute Resolution Supervisor for Chemical Bank and First Chicago National Bank. She holds a Bachelor of Science degree from North Carolina A&T State University and will complete her Master of Public Administration from Old Dominion University in 2005.

Management Initiatives

Since Fiscal Year 2004, the City has been implementing a long-term water and wastewater infrastructure renewal program. The plan calls for a combined expenditure of \$350 million over ten years to upgrade aging components of the water and wastewater infrastructure. Beginning in Fiscal Year 2004, the Water Fund component of the program calls for a 10-year \$170 million expenditure. The City Council approved the funding of the renewal program on May 20, 2003 with a series of gradual and predictable rate adjustments under Ordinance Number 41,047, Section 14.

The drought of 2001-2002, for which Governor Mark Warner declared a drought emergency on August 30, 2002 under Executive Order 33, had very little impact on the Norfolk Water System. This enabled the Department to assist its neighboring cities by providing surplus water. The City entered into a spot water sale agreement with the City of Virginia Beach to provide 10 mgd of surplus raw water at a rate of 39.4 cents per 1,000 gallons. This agreement lasted from December 17, 2001 through November 30, 2002. The City also entered into an emergency drought relief contract with the City of Portsmouth on October 4, 2002 to provide 10 mgd of surplus raw water at a rate of 48.4 cents per 1,000 gallons. No water was sold to Portsmouth during the drought.

The City of Norfolk entered into a long-term raw water sales contract with the City of Chesapeake on December 17, 2002. Under the contract, Norfolk will provide the City of Chesapeake 7 mgd of raw water. The treatment plant is currently under construction; raw water sales will begin in July 2006 on a take or pay basis. The raw water will be sold at a Fiscal Year 2003 rate of 95 cents per 1,000 gallons adjusted annually for inflation.

Other developments since 2001 include:

- Completed an EPA mandated vulnerability assessment.
- Won the Gold Award for Competitiveness Achievement from the Association of Metropolitan Water Agencies in October 2002.
- Negotiated new water sales contract with the U.S. Navy which bases the water rate on the Norfolk retail water rate.
- Developed a 10-year financial plan that addresses operational, regulatory and financial needs in support of the approved rate plan.
- Developed a 30-year capital improvement plan.

Future initiatives of the Department include:

- Continue to implement long-term infrastructure renewal plan. The plan will address the condition of dams to meet federal and state dam safety regulations, the upgrade of aging section of raw and finished water piping and the upgrade of components of the 37th Street Water Treatment Plant.
- Continue to market surplus water.
- Replace the utility billing and information system. The City has issued a request for proposal to implement a new customer service information system. Contract negotiations are currently underway.
- Preserve the City's groundwater withdrawal rights through its permit renewal process.
- Study the feasibility of implementing automated meter reading.

THE SYSTEM

History and Overview

The City developed a surface water supply network starting with the use of a spring near Main Street in the late 1600s, through the development of an in-town lake system in the late 1800s, to the development of Lake Prince and Lake Burnt Mills in the City of Suffolk and Isle of Wight County in 1918 and the Western Branch Reservoir in the City of Suffolk in 1962. In the 1940s through the 1960s the System expanded, and the Blackwater and Nottoway River intakes in Southhampton County were added. The existing surface water supply system will meet all of Norfolk's retail needs and all contract and non-contract wholesale requirements.

In order to process water, two treatment plants have been constructed and maintained. The Moores Bridges treatment plant, constructed in the late 1890s, currently supplies all public water consumed in Virginia Beach and portions of the water consumed in the City. The 37th Street treatment plant, originally put into service in the 1920s, supplies water to the remainder of the City. Both treatment plants serve the U.S. Navy and a portion of Chesapeake.

Over time, the System has developed and expanded into the major regional provider of water for Southside Hampton Roads, currently serving an area encompassing a population of approximately 800,000, or 10% of the Commonwealth of Virginia.

The first transmission line to Virginia Beach was installed in 1924, and the City has provided water to its neighbor ever since through long-term water supply contracts. A water services contract provides for the System's wheeling and treating of Virginia Beach raw water, either from Lake Gaston or Stumpy Lake, through Fiscal Year 2030. The U.S. Navy and the City of Chesapeake are long-standing wholesale water customers. Although the City currently has no water supply contract with Chesapeake, the City sells water to Chesapeake at a rate equivalent to the City's retail rates. Starting in Fiscal Year 2007, the City also will sell raw water to the City of Chesapeake. See "Wholesale Contracts" for further discussion of relationships with the Cities of Chesapeake, Portsmouth, Virginia Beach, and the U.S. Navy.

For additional information with respect to the System, see the Feasibility Study which appears as Appendix A to this Official Statement.

Water Supply

The System receives water from a series of eight City-owned water supply reservoirs which are located as follows: three in the City of Suffolk and Isle of Wight County (which collectively are known as the "Western Reservoir System"), three in the City of Virginia Beach, and two in Norfolk (which collectively are known as the "In-Town Reservoirs"). The System's current raw water storage capacity is 15.2 billion gallons. These reservoirs are supplemented by two river intakes at the Blackwater and Nottoway Rivers and four ground water wells owned by the City that are available in times of shortages.

Stumpy Lake. On June 14, 2001, the City sold its Stumpy Lake reservoir, pump station, and raw water transmission main to the City of Virginia Beach. This sale provides Virginia Beach with an additional 2.0 mgd of raw water safe yield.

As more fully discussed in the section entitled "Wholesale Contracts" and in Appendix E, "SUMMARY OF NORFOLK-VIRGINIA BEACH WATER SERVICES CONTRACT," the City and Virginia Beach entered into the Water Services Contract, as amended, and extending through June 30, 2030, to provide for the treatment and delivery of finished raw water supplied by the City to Virginia Beach, whether from Lake Gaston or Stumpy Lake, up to the contract maximum limit of 45.0 mgd, or 46.8 mgd upon request from Virginia Beach and approval from Norfolk. Under the utility basis of cost recovery for this Contract, Virginia Beach is paying the City its proportionate share of annual operation and maintenance expense, depreciation, and return on specific System facilities used by the City to provide service to Virginia Beach. Such facilities include several expansion and improvement projects to increase the System's capacity to receive Lake Gaston water for treatment at the Moores Bridges Water Treatment Plant ("WTP"); improvements to master water meters; construction of a raw water pumping station, a raw water booster pumping station and a second high service pumping station at the Moores Bridges WTP; construction of raw water and treated water transmission mains; and hydraulic improvements at the Moores Bridges WTP, including improvements to flash mixers, sedimentation basin, filters, plant laboratory, maintenance facilities and administrative offices.

On April 28, 1995, the City commenced the System improvements necessary to treat the Lake Gaston water after the City was requested to do so by Virginia Beach. Under the terms of the Water Services Contract, as

amended, Virginia Beach is obligated to pay the City for all costs so incurred irrespective of Virginia Beach's ability to continue to provide Lake Gaston water.

Regional Water Requirements. The Moores Bridges WTP was expanded to provide for the treatment of up to 45 mgd of raw water that Virginia Beach receives from the Lake Gaston Reservoir. Norfolk is treating this water under a water services contract that went into effect in Fiscal Year 1998. This released 32 mgd of raw water from the Norfolk System that was being sold to Virginia Beach under the then existing water supply contract. The sale of 7 mgd of raw water under the City's wholesale raw water contract with the City of Chesapeake is expected to begin on July 1, 2006. Norfolk believes that continued growth in the South Hampton Roads area, including Virginia Beach, will generate a demand for this water. The City has begun discussions with several potential customers for either wholesale raw water and/or treated water, recognizing that it may take many years to contract, plan and construct water transmission and/or treatment facilities.

Water Treatment Facilities

The City owns and through the Department operates two major water treatment plants, the Moores Bridges WTP and the 37th Street WTP. The Moores Bridges WTP, with a rated capacity of 108 mgd (maximum day), provides finished water primarily to the eastern two-thirds of the City and the City of Virginia Beach. The 37th Street WTP, with a rated capacity of 28 mgd (maximum day), provides finished water primarily to the western one-third of the City. Flow from both treatment plants serves the U.S. Navy facilities and the urban Northeastern section of Chesapeake. The City also provides raw water to a U.S. military facility in the City of Portsmouth.

Water Distribution and Storage Facilities

The System's distribution facilities within Norfolk include two ground level storage tanks with pumping stations, two elevated water storage tanks, approximately 16,200 water valves and approximately 4,100 hydrants. Treated water is distributed throughout the City, to the city limits of Virginia Beach and Chesapeake, and to the gates of the Naval facilities by more than 800 miles of water mains. For Fiscal Year 2004, peak day water production was 81.8 mgd and average day production was approximately 68.1 mgd. Average day production includes approximately 5.0 mgd of unaccounted for water, such as losses, water used for fire protection, and the flushing of water mains. According to the American Water Works Association (AWWA), the optimum unaccounted for water level for efficient distribution systems should be less than 10% of volume of water produced. Nationwide, AWWA reports that water utilities average about 15% unaccounted-for-water. For Fiscal Year 2004, the System's unaccounted for water level was approximately 10% which is within AWWA's acceptable levels.

Customer Base

As of June 30, 2004, the System had approximately 63,000 active accounts, a slight increase over the last five years. This trend is primarily due to the redevelopment and construction of new housing units in areas such as East Beach and Broad Creek. It is anticipated that the level of accounts will begin to stabilize. Prior to Fiscal Year 1998, Virginia Beach's water use was restrained from growth by the City due to concerns about exceeding the safe yield of the System's sources. Since Virginia Beach has completed the Lake Gaston Project, purchased Stumpy Lake and lifted its water consumption restrictions, Virginia Beach's water usage is expected to again begin increasing. The average annual daily amount of finished water pumped for Fiscal Year 2004 was 68.1 mgd, including approximately 5 mgd of unaccounted for water.

Table 1 Average Metered Consumption Fiscal Year 2004

	Metered Consumption (mgd)	Percent of Total
Norfolk	19.3	30.4%
Virginia Beach	35.5	55.8%
Navy	5.7	8.9%
Chesapeake	<u>3.1</u>	4.9%
TOTAL	63.6	100.0%

Source: City of Norfolk. Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2004.

Table 2 Ten Largest Retail Customers Fiscal Year 2004

Customer	Annual Water Consumption (1,000 gallons)
Norfolk Redevelopment and Housing	534,000
Authority	
Ford Motor Company	232,000
Sentara Health System	136,000
Norfolk State University	120,000
Norshipco	111,000
S. L. Nusbaum	109,000
Norfolk School Board	91,000
Medical College of Hampton Roads	69,000
DePaul Hospital	67,000
Ecolochem	<u>63,000</u>
TOTAL	1,532,000

Source: Department of Utilities.

The ten largest retail customers together represent less than 10% of total water consumption, and no single retail customer represents more than 3% of total consumption.

Wholesale Contracts

The City maintains wholesale contracts or water service agreements with the City of Chesapeake ("Chesapeake"), the City of Virginia Beach ("Virginia Beach"), the City of Portsmouth ("Portsmouth") and the United States Department of the Navy ("Navy"). These contracts and agreements set forth the amount of water to be sold, rate setting procedures, metering points, dispute resolution and other matters.

The descriptions of the contracts and agreements set forth below are brief outlines or summaries of certain provisions. Such outlines and summaries do not purport to be complete, and reference should be made to each respective contract or agreement. Copies of the contracts and agreements may be obtained from the City for a full and complete statement of their provisions.

City of Virginia Beach. On July 14, 1993, the City entered into a water sales contract (the "Water Sales Contract") and a water services contract (the "Water Services Contract") with Virginia Beach. The Water Sales Contract served as an interim arrangement for the sale of surplus System water to Virginia Beach pending completion of the Lake Gaston Project. Since January 1998, the Water Services Contract provides for the City's treatment and delivery of potable Lake Gaston water to Virginia Beach now that the Lake Gaston Project is completed. In 2001, the Water Services Contract was amended. As of June 2004, the amended Water Services Contract covers the use of Virginia Beach's Stumpy Lake raw water source in conjunction with Lake Gaston water.

The Water Services Contract, as amended, is a long-term contract (effective through June 30, 2030) which requires the City to receive, convey, treat and deliver to Virginia Beach up to an average of 45 mgd, or 46.8 mgd upon Virginia Beach's request and Norfolk's approval, of finished water to be provided from Virginia Beach's two raw water sources. The Water Services Contract, as amended, establishes engineering, water quality and operational standards for the City to meet as it provides service to Virginia Beach. Accordingly, certain components of the System, including raw water storage, raw water pumping stations and transmission lines, water treatment plants and treated water storage, and finished water pumping and transmission facilities, will be utilized to provide treated water to Virginia Beach. The Water Services Contract, as amended, also provides that Virginia Beach will pay its proportionate share of the capital costs of the System irrespective of Virginia Beach's ability to provide raw water.

Certain components of the payments required by the Water Services Contract are not related to actual water usage. All payments by Virginia Beach under the Water Services Contract, including any termination payments, are secured solely by revenues received by Virginia Beach from charges paid by users of its water and sewer system. The Water Services Contract requires that such payments be designated by Virginia Beach as operating expenses of its water and sewer system and, as such, are payable ahead of debt service on future general obligation bonds and

revenue bonds paid from Virginia Beach water and sewer system revenues. The Water Services Contract may be terminated by the City or by Virginia Beach upon the occurrence of various events (see "SUMMARY OF NORFOLK - VIRGINIA BEACH WATER SERVICES CONTRACT" appearing as Appendix E to this Official Statement) and provides for substantial termination payments by Virginia Beach which may not exceed \$102,252,907 or such higher amount as are the City's actual costs to construct the Lake Gaston related facilities described in the Water Services Contract.

For a more detailed description of the Water Services Contract see Appendix E, "SUMMARY OF NORFOLK-VIRGINIA BEACH WATER SERVICES CONTRACT." The above description of the Water Services Contract and all references in this Official Statement to such contract are brief outlines or summaries of certain of its provisions. Such outlines and summaries do not purport to be complete, and reference should be made to the Water Services Contract, copies of which may be obtained from the City, for a full and complete statement of its provisions.

City of Chesapeake. The City sells Chesapeake wholesale finished water at various delivery points for service to the northeastern section of Chesapeake. Sales in Fiscal Year 2004 averaged 3.14 mgd which represents approximately 5% of the System's total metered water consumption. Rates are set by ordinance of the City Council.

In December, 2002, the City entered into a raw water sales contract with Chesapeake for the sale of the City's surplus raw water to Chesapeake. The contract start-up date is July 1, 2006 and the term is through December 31, 2042. The contract specifies the terms and conditions of the sale, rates, termination provisions and dispute resolution. It is assumed that raw water sales will average 7 mgd starting in Fiscal Year 2007. In the contract, the City agrees to sell and deliver to Chesapeake and Chesapeake agrees to accept a targeted amount of raw water transmitted to the extent possible at a uniform flow rate. The initial targeted amount of raw water is 7 mgd.

The initial water rate was initially set at \$0.95 per thousand gallons of surplus raw water sold, with such rate being effective through June 30, 2003. Each July 1 thereafter, the then existing water rate shall be adjusted based on the change in the Consumer Price Index, but in no instance shall the water rate decrease. Chesapeake will begin making monthly payments for the metered amount of surplus raw water delivered on August 1, 2006.

City of Portsmouth. In 2002, the City entered into a contract with the City of Portsmouth for the sale of emergency raw water. Portsmouth has constructed the necessary improvements to convey the raw water to its treatment facility. According to the contract, the City shall endeavor to deliver and sell to Portsmouth up to 10 mgd of temporary surplus raw water. The rate of the temporary surplus raw water sold pursuant to the contract shall total \$0.484 per thousand gallons. No surplus water has been sold to Portsmouth.

U.S. Navy. The City has a long-standing relationship of providing water to the U.S. Navy on a wholesale basis. The contract was modified effective July 1, 2003 to establish treated water rates applicable to the United States Navy facilities in Norfolk and Virginia Beach. Sales to the Navy averaged 5.55 mgd in Fiscal Year 2004 which represents approximately 9% of total metered water consumption for the System.

The Navy agrees to pay the following rates for treated water delivered to the points of delivery as contained in the Water Services Specifications during the term of the Contract:

Fiscal Year	Rate(\$/ccf)(1)
2004	\$3.04
2005	\$3.31
2006	\$3.58
2007	\$3.71
2008	\$3.84

(1) Rates in the contract are in dollars per Kgal.

The rates set forth above will be fixed rates applied to the actual amount of water delivered to the points of delivery. The rates set out above will be the final rates for the periods noted and there shall be no adjustments to these rates based on a true-up cost of service study.

Notwithstanding the above rate schedule, in the event that the City Council acts to amend the uniform retail water rate ordinance as previously adopted for the period Fiscal Year 2004 through Fiscal Year 2008, the Navy agrees to pay the amended City of Norfolk uniform retail water rate plus 10%.

The Service Area

The System's current service area covers approximately 334 square miles and includes the City, Virginia Beach and the urban northeastern section of Chesapeake as well as Naval installations in the City, Virginia Beach and Portsmouth. This service area is part of what is commonly known as Southside Hampton Roads. These jurisdictions vary greatly in population and character. Virginia Beach and the City have the first and second largest populations of any cities in the Commonwealth, respectively. Chesapeake, currently the third largest city in the Commonwealth, is experiencing rapid population growth, and has significant land available for residential and commercial development. Ranked by geographical size, Chesapeake is the second largest city in the Commonwealth and Virginia Beach is third. The City is the most densely populated of the three communities and has extensive waterfront development and the region's central business district.

Virginia Beach and Chesapeake have grown to a degree that they are no longer only suburban, though both still serve as residential communities for many working in the City. Virginia Beach has the highest income and property values in the region and also is a resort city with over 10,000 hotel rooms and a significant tourist industry along its beachfront. Both cities promote industrial growth and each has extensive agriculture activity in its southern area.

Table 3 summarizes population trends from 1980 through 2003.

Table 3 Population 1980-2003

Area	<u>1980</u>	<u>1990</u>	2000	<u>2003</u>
Norfolk	266,979	261,250	234,403	234,100
Virginia Beach	262,199	393,089	425,257	428,200
Chesapeake	114,486	151,982	199,184	206,600
Hampton Roads MSA	1,160,311	1,430,974	1,551,351	1,559,000
Commonwealth of Virginia	5,346,818	6,189,197	7,078,515	7,386,300
United States	226,542,203	249,632,692	281,421,000	290,809,777

Source: U.S. Department of Commerce, Bureau of the Census and the Weldon Cooper Center for Public Service, University of Virginia.

Table 4 provides per capita income comparisons from 1998 through 2002.

Table 4
City of Norfolk, Virginia
Per Capita Personal Income Comparisons
1998-2002

<u>Year</u>	City	Hampton Roads MSA	<u>Virginia</u> <u>Beach</u>	<u>Chesapeake</u>	<u>State</u>	<u>U.S.</u>
1998	\$21,313	\$24,154	\$27,271	\$23,458	\$27,968	\$26,893
1999	21,848	24,905	28,356	24,646	29,246	27,880
2000	22,693	26,288	30,098	26,838	31,210	29,760
2001	23,271	27,452	31,273	27,879	32,338	30,413
2002	24,873	28,365	32,374	28,910	32,860	30,906

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, 2003.

Note: Figures for 2003 were unavailable on date of publication.

The City has the largest concentration of naval installations in the world. These installations include (i) the Norfolk Naval Base which is the home port for over 100 ships and is one of only two Naval ports on the east coast that can accommodate aircraft carriers; (ii) the Supreme Allied Atlantic Command of the North American Treaty Organization (NATO), which is the only NATO facility in the United States; (iii) the headquarters of the Navy's Atlantic Fleet; (iv) the Norfolk Air Station; and (v) several other major Naval commands. The Norfolk Naval Base, located in the City along the Chesapeake Bay, has been a major military installation since World War I.

The Navy remains a mainstay of the increasingly diversified southeastern Virginia economy. The Navy's direct economic impact on the region was \$9.97 billion in 2003, comprised of a total annual payroll of \$6.37 billion and the balance consumed on goods and services and procurement contracts. The region is host to approximately 112,533 active duty personnel with approximately 70,302 of these military and civilian defense employees employed in the City. This federal presence in the economy tends to smooth out fluctuations in the business cycle and to reduce the severity of recessions. Unemployment in the Hampton Roads area has historically been below the national average, especially during economic downturns. Although large military deployments can adversely affect the area's economy, especially consumer spending, the City and region in recent years has successfully diversified its economic base. Furthermore, any reduction in the federal government's military or civilian spending or presence in the service area could have an adverse impact on the service area's economy.

Annual employment figures and unemployment rates are shown in Table 5 and Table 6, respectively.

Table 5
Employment
1999-December 2004

Year	<u>Norfolk</u>	Virginia Beach	Chesapeake
1999	78,960	205,546	103,164
2000	83,571	204,006	102,992
2001	84,061	205,483	104,594
2002	85,975	208,759	106,731
2003	87,576	212,649	108,720
Dec. 2004	89,346	216,945	110,916

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, Virginia Employment Commission.

Note: Annual Not Seasonally Adjusted Labor Force.

Table 6 Unemployment Rates 1999-December 2004

Year	Norfolk	<u>Virginia</u> Beach	Chesapeake	Hampton Roads MSA	Virginia	U.S.
				<u> </u>		
1999	5.2%	2.7%	2.6%	3.4%	2.8%	4.2%
2000	4.0	2.2	2.2	2.6	2.2	4.0
2001	5.4	3.0	2.9	3.5	3.4	4.7
2002	6.2	3.5	3.3	4.2	4.1	5.8
2003	6.5	3.7	3.6	4.4	4.1	6.0
Dec. 2004	5.8	3.1	3.1	4.0	3.0	5.4

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, Virginia Employment Commission.

Manufacturing activities in the region include shipbuilding and repair, truck assembly, food processing, paper milling and assorted light assembly operations. The region's harbor is host to a variety of firms which engage in import and export activities. Appalachian coal is the principal export product although significant amounts of grain and general cargo also are exported. The volume of imports is considerably less than exports and is primarily general cargo. Tourism, along with a growing convention business, is an additional source of regional income. General farming is the area's primary agricultural activity.

The annual volume of retail sales for the City, Virginia Beach and Chesapeake for 1999 to 2003 is shown in Table 7.

Table 7
Retail Sales
(Millions of Dollars)

<u>Area</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Norfolk	\$2,138.5	\$2,285.1	\$2,325.0	\$2,319.6	\$2,417.7
Virginia Beach	3,343.7	3,655.8	3,683.7	3,903.2	4,090.0
Chesapeake	2,012.1	2,247.6	2,240.1	2,348.9	2,597.7

Source: Virginia Department of Taxation.

CAPITAL PROGRAM

The City annually prepares a five-year capital improvement plan for the System incorporating all known capital costs over that period. Future year projects in the Capital Improvement Plan ("CIP") are considered for planning purposes only until funds are provided and may be modified, at any time, by the City Council. The CIP for Fiscal Years 2005 through 2009 includes projects which are estimated to cost \$96.3 million. These projects are classified in the following categories: (i) facility renovations and upgrades; (ii) retail water distribution system improvements; and (iii) regulatory driven projects. The anticipated timing of project costs associated with the current CIP is shown in Table 8.

Table 8
Capital Improvement Plan
(Fiscal Year Ending June 30)
(\$000s)

	<u>2005</u>	<u> 2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	TOTAL
Facility Renovations and Upgrades	\$4,600	\$2,750	\$7,500	\$1,500	\$2,100	\$18,450
Retail Water Distribution System Improvements	9,550	9,900	11,300	10,900	10,900	52,550
Regulatory Driven Projects	<u>200</u>	<u>7,500</u>	<u>200</u>	<u>16,200</u>	1,200	25,300
Total	\$14,350	\$20,150	\$19,000	\$28,600	\$14,200	\$96,300

Source: City of Norfolk, Virginia, FY2005-FY2009 Approved Capital Plan.

Facility renovations and upgrades include the installation of emergency backup power systems at the Western Branch Pumping Station, design of refurbishments and upgrades at the 37th Street Water Treatment Plant, upgrades to the Nottoway and Blackwater River Pump Stations, replacement of sections of raw water pipe serving the 37th Street Water Treatment Plant from Western Branch and the replacement of culverts at Lake Whitehurst. Retail water distribution system improvements are primarily normal repair and replacement items such as valves, hydrants, and pipes. Regulatory driven projects primarily include projects to improve the operational integrity of reservoir spillways and dams as required by the Virginia Dam Safety Act.

System expansion capital projects include Lake Gaston related capital improvements, which permit Virginia Beach to meet its separate contractual obligations to Chesapeake and as agreed in the Water Services Contract. For a more detailed representation of system expansion capital improvements, see the Feasibility Study included as Appendix A to this Official Statement.

Operation of the System requires compliance with environmental laws and regulations. For a more detailed representation of regulatory driven capital improvements, see the Feasibility Study included as Appendix A to this Official Statement. The Feasibility Study, however, does not purport to be a complete, comprehensive or definitive summary of all currently required or proposed water quality laws and regulations. Future legislative and regulatory

proposals applicable to the System could result in increased capital or operating costs beyond those currently projected by the City.

Proceeds from the 2005 Bonds, along with other funds on hand, are expected to pay the cash flow requirements of CIP and current construction-work-in-progress project costs to be incurred through Fiscal Year 2006. The City expects to issue Additional Bonds under the Indenture in Fiscal Year 2007 to finance portions of the remaining cash flow of project costs in the CIP and construction-work-in-progress to be incurred in Fiscal Year 2007 and Fiscal Year 2008.

The estimated project costs indicated above are based upon the City's assumptions of future events and existing practices which are subject to revision as actual water utility operating results, regulatory requirements and City policy changes dictate. For a detailed description of the CIP, see the Feasibility Study included as Appendix A to this Official Statement.

FINANCIAL MANAGEMENT

Overview

On July 1, 1979 the City Council established the Water Utility Fund (the "Fund") as a distinct enterprise fund of the City to account for all of the financial activity related to providing water services to its customers. The Fund is operated on a self-supporting basis.

Since its inception, regular transfers have been made from the Fund to the City's general fund for payments in lieu of taxes and as a return on the City's investment in the System. Additionally, transfers have been made to pay all debt service on general obligation bonds issued by the City to pay for System improvements. The City currently intends to pay for all future System capital costs from revenues and proceeds of Bonds. The Fund is reported on an accrual basis of accounting. Included in Appendix B to this Official Statement are the audited financial statements for the Fund for the Fiscal Years ended June 30, 2004 and 2003.

Rate Regulation

The power of the City to fix, charge and collect rates, fees and other charges for the use of and for the services furnished by the System is not subject to the regulatory jurisdiction of the State Corporation Commission of Virginia or any other federal, regional, state or local regulatory body. Subject to existing contractual commitments, the City has sole and exclusive authority over such rates, fees and other charges.

Water Rates

Retail rate recommendations are developed prior to the City's budgetary process. Retail rates are set by City Council. Virginia Beach formula driven biennial wholesale rate revisions are not submitted for City Council approval. The Department uses a retail rate structure comprised of a uniform rate per thousand gallons, with no quantity discount or lifeline rate, and a uniform service charge per bill. The System's retail customers' average annual cost for Fiscal Years 2000 through 2004 are shown in Table 9 for ease of comparison with wholesale customers' average annual costs during the same period shown in Tables 10, 11, and 12.

Table 9 Retail Customers' Average Annual Cost Norfolk Retail

Fiscal Year	Revenue (\$)	Volume (Mgal*)	Average Cost (\$/Mgal*)
2000	\$25,555,000	7,388,000	\$3.46
2001	25,023,000	7,229,000	3.46
2002	24,955,000	7,207,000	3.46
2003	24,669,000	7,121,000	3.46
2004	26,758,000	7,049,000	3.80

^{*} Mgal = 1,000 gallons

Source: Department of Utilities.

The rates from the wholesale contract with Virginia Beach are formula driven based on projected operating and capital cashflow expenditures for two years. Virginia Beach's bills reflect a four part rate structure. Two parts

of the rate structure are fixed monthly charges which recover proportional share of costs for system capacity designed to serve, and used by, them. One part of the rate structure is a fixed charge related to their reservation of Norfolk's surplus water, as appropriate. One part of the rate structure is a uniform rate which recovers their proportional share of variable operation and maintenance costs based on current use. Chesapeake's single uniform rate is based on an equivalent retail rate that recovers costs associated with the City's retail service charge and uniform rate. The System's wholesale customer average annual costs for Fiscal Years 2000 through 2004 are summarized in Tables 10 through 12 for ease of comparison with retail customers' average annual costs shown in Table 9.

Table 10 Wholesale Customers' Average Annual Costs Virginia Beach

Fiscal Year	Revenue (\$)	Volume (Mgal*)	Average Cost (\$/Mgal*)
2000	\$24,991,000	12,162,000	\$2.05
2001	24,641,000	12,246,000	2.01
2002	24,774,000	12,483,000	1.98
2003	25,465,000	12,459,000	2.04
2004	23,206,000	12,954,000	1.79

^{*} Mgal = 1,000 gallons

Source: Department of Utilities.

Table 11 Wholesale Customers' Average Annual Costs U.S. Navy, including Norfolk and Virginia Beach

Fiscal Year	Revenue (\$)	Volume (Mgal*)	Average Cost (\$/Mgal*)
2000	\$7,990,000	2,064,000	\$3.87
2001	9,231,000	1,930,000	4.78
2002	9,452,000	1,881,000	5.02
2003	9,579,000	2,262,000	4.23
2004	8,255,000	2,031,000	4.06

^{*} Mgal = 1,000 gallons

Source: Department of Utilities.

Table 12 Wholesale Customers' Average Annual Costs Chesapeake

Fiscal Year	Revenue (\$)	Volume (Mgal*)	Average Cost (\$/Mgal*)
2000	\$4,179,000	1,208,000	\$3.46
2001	3,814,000	1,102,000	3.46
2002	3,793,000	1,096,000	3.46
2003	4,396,000	1,270,000	3.46
2004	4,356,000	1,149,000	3.80

^{*} Mgal = 1,000 gallons

Source: Department of Utilities.

As shown in Table 13, the System's charges compare favorably with other providers of water in the region.

Table 13 Water Charges in the Region (as of July 1, 2004)

<u>City</u>	Monthly Water Charges for Median Household (1)(2)
Virginia Beach	\$21.99
Chesapeake	26.00
Norfolk	22.07
Newport News	22.34
Portsmouth	20.71

- (1) Based on estimated average consumption of 5,236 gallons per month.
- (2) Excludes utility taxes levied by the City.

Source: Department of Utilities.

Billing, Collections and Enforcement Procedures

The Department bills for water monthly using a 1979 custom-developed and maintained computerized billing and information system that combines account, work order, meter and customer service management. Effective May 1994, the Department implemented a joint billing program with Hampton Roads Sanitation District ("HRSD"), a political subdivision of the State that provides wastewater treatment to the Hampton Roads region. This program has resulted in annual billing and collection efficiencies to the City and HRSD of approximately 99.3%.

Meters are read on a monthly basis. Billing data is transmitted to the Hampton Roads Utility Billing System (HRUBS), which is managed by HRSD, for the inclusion with HRSD's billing of wastewater, resulting in bills mailed within two days from when meters are read. The Department uses estimated billing only in extraordinary circumstances.

The Department has a collection staff that actively pursues the collection of past due bills in coordination with its efforts with the City's Legal Department and HRSD. Extensive efforts are directed towards collection of delinquent accounts. Water customers are subject to having their water service discontinued if payments are delinquent by more than 45 days. Water service is restored when full payment is received or an acceptable payment plan is arranged. Delinquent bills are pursued with the use of property liens, payment arrangements and through the court system. Accounts are written off after they have been inactive for three years and collection efforts have not been successful. The Department participates in the State Debt Set-Off Program, which provides a way for the Department to have delinquent account balances, which contain the customer's social security number, withheld from the customer's Virginia State Income Tax refund or Virginia Lottery winnings. Write-offs must be approved by City Council. Historical write-offs of bad debt for Fiscal Years 1999 through 2004 are shown in Table 14.

Table 14 Water Utility Fund Bad Debt Write-off

Fiscal <u>Year</u> 1999	Years <u>Written Off</u> 1995	Amount \$ 275,897	Corresponding Billed Water Revenue (1) \$ 51,133,150	% of Net Charges for Services 0.54%
2000	1996	369,908	55,182,568	0.67
2001				
2002	1997	358,240	56,088,999	0.64
2003	1998 1999	416,736 271,794	56,503,568 68,648,309	0.74 0.40
2004	2000	293,429	59,729,090	0.49

Corresponding Billed Water Revenue relates to revenue billed for the years in which the accounts receivable originate.

Source: Department of Utilities.

Budget Process

The Department prepares and updates, on a biennial basis, its five-year Strategic Financial Plan. This plan is the basis for determining estimated expenses and revenue requirements and developing recommendations for rates. From this plan, the Department prepares an annual budget for the Water Utility Fund in conformity with the City's requirements and procedures for the ensuing fiscal year. The proposed annual budget is sent to the City's management in January for review prior to City Council approval in May. An interactive process is used during this review, involving personnel from the Department of Finance and Budget. The Water Utility Fund is accounted for on a full accrual basis which recognizes and records expenses when goods and services are received and revenues when earned. The budget is prepared on a cash basis and non-cash items such as depreciation are not included. The Water Utility Fund is a self-supporting enterprise fund with no subsidy from the City's general fund. All debt service on general obligation bonds issued to fund System improvements, a payment in lieu of taxes (PILOT), a return on investment and indirect overhead are budgeted to be paid from the annual revenues of the Water Utility Fund. The Water Utility Fund annual budgets for Fiscal Year 2004 and Fiscal Year 2005 are shown in Table 15.

Table 15
Water Utility Fund
Annual Budget
(Fiscal Year Ending June 30)
(Cash Basis)

Revenue	2004	2005
Total Water Revenue	\$62,018,321	\$66,847,231
Interest Income	968,433	585,090
Miscellaneous	8,666,246	4,982,679
Total Revenue	<u>\$71,653,000</u>	<u>\$72,415,000</u>
Appropriations		
Personnel Services	\$12,303,298	\$14,105,696
Materials, Supplies & Repairs	8,599,298	8,586,074
General Operations and Fixed Charges	8,220,886	8,388,724
Equipment	914,141	635,237
Allocated Overhead	1,441,762	1,968,265
Debt Services & Expenses		
Revenue Bond	20,291,043	20,306,309
General Obligation Bond	8,399,588	6,983,671
Payment in Lieu of Taxes	2,903,131	2,941,024
Transfer to General Fund	8,500,000	8,500,000
Contingency	79,853	$\underline{0}$
Total Appropriations	<u>\$71,653,000</u>	<u>\$72,415,000</u>

Source: City of Norfolk. Approved Budget. Fiscal Year 2005.

Results of Operations

Statements of Revenues, Expenses and Changes in Retained Earnings for the Water Utility Fund have been compiled from the City's Comprehensive Annual Financial Report (CAFR) for Fiscal Year 2000 through Fiscal Year 2004 and appear in Table 16. The statements have been organized in such a manner as to facilitate year to year comparisons.

Table 16
Water Utility Fund
Statement of Revenues, Expenses, and Changes in Retained Earnings
Accrual Basis
(Fiscal Year Ended June 30)

	<u>2000</u>	<u>2001</u>	2002 ⁽¹⁾	<u>2003</u>	<u>2004</u>
Operating Revenues					
Net charges for services	\$59,729,090	\$59,125,866	\$59,318,470	\$63,785,185	\$60,964,284
Miscellaneous	2,150,392	2,932,113	3,513,749	2,779,992	4,374,025
Total operating revenues	61,879,482	62,057,979	62,832,219	66,565,177	65,338,309
Operating Expenses					
Personal services	8,700,588	8,858,422	9,964,025	11,101,788	11,321,992
Plant operations	5,580,079	4,779,821	4,898,976	5,275,780	5,040,432
Chemicals	1,583,713	1,503,497	1,730,432	1,592,238	1,644,474
Provision of bad debts	82,188	496,085	1,494,188	252,813	414,468
Depreciation	8,700,446	9,155,844	9,388,706	9,321,367	9,567,306
Retirement contribution				954,769	1,350,927
Administrative expenses	1,318,521	1,277,371	1,330,273	1,464,304	1,477,686
Other	11,702,733	11,817,007	9,603,564	10,230,396	15,509,885
Total operating expenses	37,668,268	37,888,047	38,410,164	40,193,455	46,327,170
Operating income	24,211,214	24,169,932	24,422,055	26,371,722	19,011,139
Nonoperating Revenue (expenses):					
Interest income, net of interest					
capitalized	2,576,840	2,401,321	849,446	511,015	348,504
Interest expense and fiscal charges	(14,298,822)	(15,837,912)	(15,301,409)	(14,185,142)	(13,741,959)
Fixed assets gain or (loss)	(922,311)	(227,019)	35,914	121,466	23,290
Unrealized gain/(loss) on investments	(287,443)	414,979	379,118	(3,350)	(572,240)
Total nonoperating revenue (expenses)	(12,931,736)	(13,248,631)	(14,036,931)	(13,556,011)	(13,942,405)
Net income (loss) before					
contributions	11,279,478	10,921,301	10,385,124	12,815,711	5,068,734
and transfers					
Operating Transfers In		102,858	70,510	253,560	138,861
Transfer to General Fund (ROI)	(8,000,000)	(10,346,000)	(8,000,000)	(8,455,000)	(8,500,000)
Income	3,279,478	678,159	2,455,634	4,614,271	(3,292,405)
Total net assets - beginning	122,084,850	125,364,333	164,775,262	167,230,896	171,845,167
Total net assets - ending	\$125,364,328	\$126,042,492	\$167,230,896	\$171,845,167	\$168,552,762

⁽¹⁾ Fiscal Year ended June 30, 2002 was the first year the City presented its financial statements under the new reporting model required by Statement No. 34 of the Governmental Accounting Standards Board (GASB 34). The 2000 and 2001 columns of this schedule are not presented in GASB 34 format.

Source: Water Utility Financial Statements, City of Norfolk Comprehensive Annual Financial Report. Fiscal Year 2000 through Fiscal Year 2004.

Management Discussion of Operating Results

The following discussion is based on operating budgets and historical operating results as shown in Table 15 and Table 16, respectively. Since inception of the Water Sales Contract and Water Services Contract with Virginia Beach and the water sales contract with the U.S. Navy, the Water Utility Fund has remained financially stable. The use of a cost of service formula driven rate for the City of Virginia Beach has assured sufficient revenue to cover the operating costs. Through this formula there is a paid return and depreciation for the use of the constructed assets and a return on assets being constructed. SEE "THE SYSTEM - Wholesale Contracts."

The revenues of the Water Utility Fund have remained fairly stable over the past three years due to increased water usage by Virginia Beach, inflation with respect to operating costs, implementation of the meter replacement and testing program, and sales to new and additional sales to existing wholesale customers. The total expenses of operating the System have increased over the last several years. These increases are attributable to inflation, the addition of new services to provide improved customer service, and the necessity to meet ever increasing regulatory requirements. Even when facing the challenges of increased expenses, the Water Utility Fund has historically lived within its budget.

PROJECTED OPERATING RESULTS AND DEBT SERVICE COVERAGE

HDR/EES, the City's Consulting Engineer with respect to the System, has prepared a Feasibility Study included in the Official Statement as Appendix A in reliance on HDR/EES as experts in the preparation of rate studies and financial projections for water systems. The Feasibility Study provides a review of existing facilities, planned capital improvements and a projection of the revenues and expenses for the System. Table 17 summarizes the Feasibility Study's projected operating results (as shown in Tables 20 and 21 of the Feasibility Study) for Fiscal Year 2005 through Fiscal Year 2009.

Table 17
Water Utility Fund
Projected Operating Results
Cash Basis
(Fiscal Years Ending June 30)
(\$000s)

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Revenues ¹	\$ 69,668	\$ 73,266	\$ 77,957	\$ 79,954	\$ 81,962
Operation and Maintenance Expenses	(28,899)	(29,839)	(31,377)	(32,405)	(33,471)
Net Revenue	40,769	<u>43,426</u>	<u>46,581</u>	<u>47,549</u>	<u>48,491</u>
Total Revenue Bond Debt Service	\$(20,514)	\$(21,487)	\$(21,795)	\$(24,394)	\$(24,397)
Current Year Debt Service Coverage	1.99	2.02	2.14	1.95	1.99
	(1.012)	A(0.105)	A (0 10 6)	Φ (2.222\)	A (2.200)
Capital Improvement paid from Operations	\$(1,912)	\$(2,125)	\$(2,186)	\$(2,232)	\$(2,380)
Payments to the City	(7.256)	((, 004)	(5.050)	(5.240)	(5.025)
General Obligation Bond Debt Service	(7,356)	(6,984)	(5,850)	(5,249)	(5,025)
Payment in Lieu of Taxes (PILOT)	(2,941)	(3,088)	(3,242)	(3,405)	(3,575)
Payment to General Fund (ROI)	(8,500)	(8,500)	(8,500)	(8,500)	(8,500)
Total Payments to the City	(18,797)	(18,572)	(17,592)	(17,154)	<u>(17,100)</u>
Change in Cash Balance and Reserves	(34)	(165)	(256)	(179)	(187)
Beginning Cash Balance and Reserves ²	13,457	13,002	14,080	18,831	22,421
Ending Cash Balance and Reserves ²	<u>\$ 13,002</u>	<u>\$ 14,080</u>	<u>\$ 18,831</u>	<u>\$ 22,421</u>	<u>\$ 26,848</u>

¹ Revenues reflect transfers to and from the Rate Stabilization Fund.

² Includes working capital plus Operating Fund and Repair and Replacement Reserve Fund balances.

CONCLUSIONS OF THE CONSULTING ENGINEER

For a more complete discussion of historical and projected operating results and debt service coverage for Norfolk's Water Utility Fund, see Table 19 and 20 of the Consulting Engineer's Feasibility Study. The Feasibility Study provides a review of the City's financial planning for the Water Utility Fund and an evaluation of the 2005 Bonds' feasibility.

The Feasibility Study has been included in the Official Statement in reliance upon the authority of the Consulting Engineer as an expert in the field of water system engineering and financial forecasts. Based on review, analysis, and assumptions set forth in the Feasibility Study, the Consulting Engineer concludes that:

- The City is currently in compliance with water quality regulations under the Safe Drinking Water Act.
- The City is currently in compliance with the requirements of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the "Bioterrorism Act").
- The funds available from the 2005 Bonds, additional borrowings, together with other money available to the City, including the release of amounts on deposit in Debt Service Reserve Fund as a result of substituting such amounts with surety bonds, will be sufficient to complete the design and/or construction of the Water System Capital improvements.
- The City's revenues from water service, including rate increases approved by Ordinance 41,047, §14 and anticipated change in wholesale rates per the contracts will be sufficient during the period Fiscal Year 2005 through Fiscal Year 2009 to pay the costs of operation and maintenance expenses, pay debt service, meet coverage requirements, pay a portion of the Water System Capital improvements and maintain required reserve balances.
- The Water System is currently operated and maintained in a manner consistent with sound engineering practices to assure continuous operation of the Water System and compliance with permits and other regulations. The City's current planning and construction practices will assure adequate facilities for maintenance of the Water System, compliance with future regulatory requirements, and growth of the Water System.
- The amount of Net Revenues received during the twelve month period ended June 30, 2004, as adjusted as permitted by Section 5.3(h)(3) of the Bond Indenture satisfies the revenue covenant contained in Section 9.4 of the Bond Indenture for the twelve month period ending June 30, 2004 taking into account the maximum amount of principal and interest payments due on (i) Bonds and Parity Indebtedness then Outstanding and (ii) the 2005 Bonds.

The Feasibility Study should be read in its entirety in order for the reader to effectively evaluate the Consulting Engineer's findings, analyses, assumptions, and conclusions.

LEGAL MATTERS

Certain legal matters relating to the authorization and validity of the 2005 Bonds are subject to the approving opinion of McGuireWoods LLP, Richmond, Virginia, Bond Counsel, which will be in substantially the form of Appendix F to this Official Statement. Such opinion will be furnished at the expense of the City upon delivery of the 2005 Bonds. Since Bond Counsel has not prepared this Official Statement and has not verified its accuracy, completeness or fairness, such opinion will be limited to matters relating to the authorization and validity of the 2005 Bonds and to the exemption of interest thereon under present federal and Virginia income tax laws. Certain legal matters will be passed on for the City by the City Attorney.

TAX EXEMPTION

General

Certain legal matters relating to the validity of the 2005 Bonds are subject to the approving opinion of McGuireWoods LLP, Richmond, Virginia, Bond Counsel. Such opinion will be furnished at the expense of the City upon delivery of the 2005 Bonds. Bond Counsel has not prepared this Official Statement or verified its accuracy, completeness or fairness and, accordingly, such opinion will express no opinion of any kind as to this Official Statement.

Bond Counsel's opinion with respect to the 2005 Bonds, in substantially the form of Appendix F, will state that, under current law and assuming compliance with the Covenants (as defined below), that interest on the 2005 Bonds (including any accrued "original issue discount" properly allocable to the owners of the 2005 Bonds) is

excludable from gross income for purposes of federal income taxation and is not a specific item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations (a "Specific Tax Preference Item"). However, for purposes of the alternative minimum tax imposed on corporations (as defined for federal income tax purposes under Section 56 of the Internal Revenue Code of 1986, as amended (the "Code")), interest on the 2005 Bonds must be included in computing adjusted current earnings. Bond Counsel will express no opinion regarding other federal tax consequences arising with respect to the 2005 Bonds.

Bond Counsel's opinion also will state that, under current law, interest on the 2005 Bonds is excludable from gross income for purposes of income taxation by the Commonwealth of Virginia. Prospective purchasers of the 2005 Bonds should consult their own tax advisors regarding the tax status of the interest on the 2005 Bonds in a particular state or local jurisdiction other than Virginia.

In delivering its opinions, Bond Counsel is (a) relying upon certifications of representatives of the City as to facts material to the opinion, and (b) assuming continuing compliance with the Covenants (as defined below) by the City, so that interest on the 2005 Bonds will remain excludable from gross income for federal income tax purposes and not become a Specific Tax Preference Item. The City has covenanted to comply with the provisions of the Code applicable to the 2005 Bonds, including among other things, requirements as to the use, expenditure and investment of proceeds of the 2005 Bonds, the use of the property financed by the 2005 Bonds, the source of the payment of and security for the 2005 Bonds, the arbitrage yield restrictions and rebate requirements imposed by the Code and certain other actions that could cause interest on the 2005 Bonds to be includable in gross income of their owners (the "Covenants"). Failure of the City to comply with the Covenants could cause interest on the 2005 Bonds to become includable in gross income for federal income tax purposes retroactively to their date of issue.

Certain Collateral Federal Tax Consequences

The following is a brief discussion of certain collateral federal income tax matters with respect to the 2005 Bonds. It does not purport to address all aspects of federal taxation that may be relevant to a particular owner of a 2005 Bond. Prospective purchasers of the 2005 Bonds, particularly those who may be subject to special rules, are advised to consult their own tax advisors regarding the federal tax consequences of owning or disposing of the 2005 Bonds.

Prospective purchasers of the 2005 Bonds should be aware that the ownership of tax-exempt obligations may result in collateral federal income tax consequences to certain taxpayers including, without limitation, financial institutions, certain insurance companies, certain corporations (including S corporations and foreign corporations), certain foreign corporations subject to the "branch profits tax," individual recipients of Social Security or Railroad Retirement benefits, taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations and taxpayers attempting to qualify for the earned income tax credits.

Original Issue Discount

The "original issue discount" ("OID") of the 2005 Bonds is the excess of such Bond's stated redemption price at maturity (excluding certain "qualified stated interest" that is unconditionally payable at least annually at prescribed rates) over the issue price of such 2005 Bonds. The "issue price" of the 2005 Bond is the initial offering price to the public at which price a substantial amount of the Bonds of the same maturity was sold. The "public" does not include bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers. The issue price for each maturity of the 2005 Bonds is expected to be the initial public offering price set forth on the inside cover page of this Official Statement. OID on the 2005 Bonds with OID (the "OID Bonds") represents interest that is excludable from gross income for purposes of federal and Virginia income taxation. However, the portion of the OID that is deemed to have accrued to the owner of a 2005 Bond in each year may be included in determining the alternative minimum tax and the distribution requirements of certain investment companies and may result in some of the collateral federal income tax consequences mentioned in the preceding subsection. Therefore, prospective purchasers of the 2005 Bonds should be aware that the accrual of OID in each year may result in alternative minimum tax liability, additional distribution requirements or other collateral federal and Virginia income tax consequences although the owner may not have received cash in such year.

Interest in the form of OID is treated under Section 1288 of the Code as accruing under a constant method that takes into account compounding on a semiannual or more frequent basis. If an OID Bond is sold or otherwise disposed of between semiannual compounding dates, then the OID that would have accrued for that semiannual compounding period for federal income tax purposes is to be apportioned in equal amounts among the days in such compounding period.

In the case of an original owner of an OID Bond, the amount of OID that is treated as having accrued on such OID Bond is added to the owner's cost basis in determining, for federal income tax purposes, gain or loss upon its disposition (including its sale, redemption or payment at maturity). The amounts received upon such disposition

that are attributable to accrued OID will be excluded from the gross income of the recipients for federal income tax purposes.

The accrual of OID and its effect on redemption, sale or other disposition of OID Bonds that are not purchased in the initial offering at the initial offering price may be determined according to rules that differ from those described above. Prospective purchasers of OID Bonds should consult their own tax advisors with respect to the precise determination for federal income tax purposes of interest accrued upon sale or redemption of such OID Bonds and with respect to state and local tax consequences of owning OID Bonds.

Original Issue Premium

In general, if an owner acquires a bond for a purchase price (excluding accrued interest) or otherwise at a tax basis that reflects a premium over the sum of all amounts payable on the bond after the acquisition date (excluding certain "qualified stated interest" that is unconditionally payable at least annually at prescribed rates), that premium constitutes "bond premium" on that bond (a "Premium Bond"). In general, under Section 171 of the Code, an owner of a Premium Bond must amortize the bond premium over the remaining term of the Premium Bond, based on the owner's yield over the remaining term of the Premium Bond, determined based on constant yield principles. An owner of a Premium Bond must amortize the bond premium by offsetting the qualified stated interest allocable to each interest accrual period under the owner's regular method of accounting against the bond premium allocable to that period. In the case of a tax-exempt Premium Bond, if the bond premium allocable to an accrual period exceeds the qualified stated interest allocable to that accrual period, the excess is a nondeductible loss. Under certain circumstances, the owner of a Premium Bond may realize a taxable gain upon disposition of the Premium Bond even though it is sold or redeemed for an amount less than or equal to the owner's original acquisition cost. Prospective purchasers of any Premium Bonds should consult their own tax advisors regarding the treatment of bond premium for federal income tax purposes, including various special rules relating thereto, and state and local tax consequences, in connection with the acquisition, ownership, amortization of bond premium on, sale, exchange, or other disposition of Premium Bonds.

Possible Legislation or Regulatory Action

Legislation affecting municipal securities is continually being considered by the United State Congress. There can be no assurance that legislation enacted or proposed after the date of issuance of the 2005 Bonds will not have an adverse effect on the tax-exempt status or the market price of the 2005 Bonds. In addition, the Internal Revenue Service has established an expanded audit and enforcement program for tax-exempt bonds. There can be no assurance that an audit initiated or other enforcement or regulatory action taken by the Internal Revenue Service involving either the 2005 Bonds or other tax-exempt bonds will not have an adverse effect on the tax-exempt status or market price of the 2005 Bonds.

PENDING LITIGATION

The City is involved from time to time in various legal actions some of which affect the System. In the opinion of the City Attorney, there is no litigation now pending or threatened to restrain or enjoin the issuance, sale, execution or delivery of the 2005 Bonds, or in any way contesting or affecting the validity of the 2005 Bonds, any proceeding of the City taken with respect to their issuance or sale, or the powers of the City with respect to the operation of the System including the City's ability to collect and apply Revenues of the System as set forth in the Indenture.

According to the City there is no litigation pending or, to its knowledge and belief, threatened which would have a material adverse effect on the operations or financial condition of the System.

BOND RATINGS

The 2005 Bonds have been rated Aaa by Moody's Investors Service, Inc. ("Moody's"), AAA by Standard & Poor's Ratings Services ("Standard & Poor's") a division of The McGraw-Hill Companies, Inc., and AAA by Fitch Ratings ("Fitch") based upon the bond insurance policy to be issued by MBIA Insurance Corporation upon delivery of the 2005 Bonds. The ratings assigned by Moody's, Standard & Poor's and Fitch are based on the claim-paying ability of MBIA Insurance Corporation and are not based on the creditworthiness of the System.

Explanations of the significance of such ratings may be obtained from Moody's, Standard & Poor's and Fitch. The ratings are not a recommendation to buy, sell or hold the 2005 Bonds and should be evaluated independently.

There is no assurance that such ratings will not be withdrawn or revised downward by Moody's, Standard & Poor's or Fitch. Such action may have an adverse effect on the market price of the 2005 Bonds. Neither the City nor the Underwriters have undertaken any responsibility after the issuance of the 2005 Bonds to assure maintenance of the ratings or to oppose any such revision or withdrawal.

FINANCIAL STATEMENTS

The audited Water Utility Fund financial statements with accompanying notes for the fiscal year ended June 30, 2004, are published, along with the accompanying report of the City's Independent Accountants, in Appendix B to this Official Statement.

FINANCIAL ADVISOR

The City has retained Public Financial Management, Inc. of Arlington, Virginia, as financial advisor in connection with the issuance and sale of the 2005 Bonds. Although Public Financial Management, Inc. has assisted in the preparation of this Official Statement, Public Financial Management, Inc. is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. Public Financial Management, Inc. is an independent advisory firm and is not engaged in the business of underwriting, trading or distributing municipal securities or other public securities.

CERTIFICATES OF CITY OFFICIALS

Concurrently with the delivery of the 2005 Bonds, the City will furnish (1) a certificate, dated the date of delivery of the 2005 Bonds, signed by appropriate City officials, stating that, to the best of their knowledge, no litigation is then pending or threatened (i) to restrain or enjoin the issuance or delivery of the 2005 Bonds; (ii) in any way contesting or affecting any authority for the issuance of the 2005 Bonds or the validity of the 2005 Bonds or the Indenture; (iii) in any way contesting the existence or powers of the City; or (iv) to restrain or enjoin the collection of the Net Revenues pledged or to be pledged to pay the principal of and premium, if any, and interest on the 2005 Bonds and (2) a certificate dated the date of delivery of the 2005 Bonds signed by the appropriate City officials and stating that the descriptions and statements in this Official Statement including the Appendices hereto (except in the section entitled "PENDING LITIGATION") at the time of acceptance of the proposal for the 2005 Bonds and at the date of delivery were and are true and correct in all material respects and do not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

SALE AT COMPETITIVE BIDDING

The 2005 Bonds were sold at competitive bidding on March 9, 2005 to Citigroup Global Markets, Inc. (the "Underwriter"). The Underwriter has supplied the information as to the interest rates and offering prices or yields of the 2005 Bonds as set forth on the inside cover of this Official Statement. If all of the 2005 Bonds are resold to the public at such offering prices or yields, the Underwriter has informed the City that they anticipate total underwriting compensation of \$114,050.

CONTINUING DISCLOSURE

The offering of the 2005 Bonds is subject to the continuing disclosure requirements of Rule 15c2-12 (the "Rule") issued by the Securities and Exchange Commission. Pursuant to the Rule, the City has undertaken for the benefit of the Bondholders to make public certain annual financial information and notice of certain material events by furnishing such information to each nationally recognized municipal securities information repository and to certain other entities. The City is in compliance with all Rule requirements.

See Appendix G "Form of Continuing Disclosure Agreement" for a more detailed description of the City's continuing disclosure undertakings.

There have been no instances in which the City has failed in any material respect to comply with the provisions of the Rule. A failure by the City to comply with its continuing disclosure undertaking will not constitute an Event of Default under the Indenture (although the Bondholders will have any available remedy at law or in equity to enforce the undertaking). However, a failure must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the 2005 Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the 2005 Bonds and their market price.

MISCELLANEOUS

This Official Statement and any advertisement of the 2005 Bonds are not to be construed as a contract with the purchasers of the 2005 Bonds. Any statement made in this Official Statement involving matters of opinion or of estimates, whether or not so expressly identified, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized.

The references in this Official Statement to and summaries of Federal, Commonwealth and City laws, including but not limited to the Constitution of the Commonwealth, the Code of Virginia, the City Charter and documents, agreements and court decisions are summaries of certain of their provisions. Such summaries do not purport to be complete and are qualified in their entirety by reference to such acts, laws, documents, agreements or decisions, copies of which are available for inspection during normal business hours at the office of the City Attorney.

Any questions concerning the content of this Official Statement should be directed to the City's Director of Finance, 600 City Hall Building, Norfolk, Virginia 23510, (757) 664-4346.

The City Council has by ordinance authorized the execution and delivery of this Official Statement on behalf of the City by the City Manager and the Director of Finance.

/s/ Regina V.K. Williams City Manager /s/ Steven G. de Mik Director of Finance



WATER UTILITY REVENUE BOND FEASIBILITY STUDY



City of Norfolk, Virginia

Consulting Engineers Report Water Revenue and Refunding Bonds, Series 2005

Final Report

March 9, 2005



Prepared by

HDR/EES 111 SW Fifth Avenue, Suite 1670 Portland, Oregon 97204



March 9, 2005

City of Norfolk 810 Union Street Norfolk, Virginia 23510

Re: Consulting Engineers Report - City of Norfolk, Virginia Water Revenue and Refunding Bonds, Series 2005

Ladies and Gentlemen:

Presented herein is a summary of our analyses, investigations and studies with respect to the proposal by the City of Norfolk, Virginia (the "City") to issue \$22,810,000 of Water Revenue and Refunding Bonds, Series 2005 (the "2005 Bonds"). The proceeds of the 2005 Bonds are to be used to: (i) fund improvements to the City's Water System, (ii) pay the cost of the Debt Service Reserve Requirement or reserve equivalent, (iii) to redeem the \$17,000,000 outstanding City of Norfolk Water Revenue Bond Anticipation Notes Series 2004 (the "2004 WRBAN") and (iv) pay the cost of issuance for the 2005 Bonds. The 2005 Bonds are being issued pursuant to the Master Indenture of Trust dated as of November 1, 1993, as previously supplemented and amended and as supplemented by the Sixth Supplemental Indenture of Trust dated March 2005 (the "Bond Indenture"). Capitalized terms used herein shall have the same meaning as set forth in the Bond Indenture unless otherwise denoted.

The 2005 Bonds are part of an overall financing program to provide for water treatment plant improvements, transmission line improvements, raw water impoundment improvements and distribution main improvements. These projects, along with other proposed future additions, betterments and extensions to the Water System are herein referred to as "the Water System Capital Improvements." The funds required for completion of the Water System Capital Improvements will be provided from the proceeds of the 2005 Bonds, additional borrowings, and other funds available to the City.

The City's Water System currently has outstanding \$54,020,000 Water Revenue Bonds Series 1993; \$98,400,000 Water Revenue Bonds Series 1995; \$75,400,000 Water Revenue Bonds Series 1998; and \$31,195,000 Water Revenue and Refunding Bonds Series 2001 (collectively the "Outstanding Bonds"). The 2004 WRBAN is outstanding, however, will be redeemed by the 2005 Bonds. The City also has outstanding \$30,320,733 in General Obligation Bonds allocable to the Water System. Such General Obligation Bonds are not secured by a pledge of the revenues derived from the ownership or operation of the City's Water System (the "Water System Revenues"); however, Water System Revenues are used to service the debt service payments of these General Obligation Bonds.

HDR/EES

111 SW Fifth Avenue Suite 1670 Portland, OR 97204-3620 Phone: (503) 223-3033 Fax: (503) 274-6248 www.hdrinc.com This report summarizes our work to the date on the report. Changed conditions occurring or becoming known after such date could affect the material presented herein to the extent of such changes.

Thank you for the opportunity to assist the City in its financing activities.

Very truly yours;

HDR Engineering, Inc. (dba HDR/EES)

_____/s/ Randall P. Goff Project Principal

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# **Executive Summary**

## Introduction

HDR/EES was retained by the City of Norfolk, Virginia (the "City") to prepare a consulting engineers report for the City's Water System (the "Water System") to determine the feasibility of the City issuing \$22,810,000 of Water Revenue and Refunding Bonds, Series 2005 (the "2005 Bonds"). As part of the process, HDR/EES reviewed the operating results of the Water System, the City's wholesale water contracts, planning information, maintenance procedures and water quality compliance. Additionally, HDR/EES personnel met with the City in September 2004 and conducted an inspection of the City's major facilities. Presented in this executive summary are the highlights of our findings and analyses.

# **Capital Improvement Plan**

A portion of the 2005 Bonds will be used to finance a portion of the City's Water System Capital Improvements. The City's current Water System Capital Improvement plan totals \$85.95 million for the period Fiscal Year 2005 through Fiscal Year 2009. The City also anticipates spending an additional \$375 million for improvements to the Water System over the subsequent 25-year period. The major near-term projects consist of upgrades to the raw water reservoir dams and spillways, raw water transmission pipelines, distribution system piping, and phased rehabilitation of the 37th Street Water Treatment Plant (WTP). These improvements will be followed by subsequent funding for continued replacement of critical portions of the raw water transmission mains, rehabilitation of the raw water pump stations at the river intakes, continued phased rehabilitation of the 37th Street WTP, upgrades to the Moores Bridges WTP, and continued repair and replacement of distribution system. These improvements will allow the City to provide continuous operation of the Water System and meet current and future regulatory requirements. A summary of the Water System Capital Improvements plan for the next five years is provided in Table 1.

# Table 1 City of Norfolk, Virginia Water System Capital Improvement Projects (1)

	Fiscal Year Ending June 30th									
Project		2005		2006		2007	2008	2009		Total
Bond Financed Projects										
37th Street WTP Design & Construction			\$	1,000,000	\$	1,500,000			\$	2,500,000
Lake Whitehurst Culverts				, ,		500,000				500,000
Western Branch PS Backup Power		3,000,000								3,000,000
Blackwater River PS Upgrades							1,075,000			1,075,000
Nottoway River PS Upgrades							1,075,000			1,075,000
Raw Water Pipelines		750,000		1,750,000		5,000,000		5,000,000		12,500,000
Security/Vulnerability		500,000						100,000		600,000
Transmission Mains				3,000,000		3,000,000	2,500,000	2,500,000		11,000,000
Distribution Mains		9,550,000		4,000,000		4,000,000	5,000,000	5,000,000		27,550,000
Dams & Spillways	_			7,300,000			16,000,000	500,000		23,800,000
<b>Total Bond Financed Projects</b>	\$	13,800,000	\$	17,050,000	\$	14,000,000	\$ 25,650,000	\$ 13,100,000	\$	83,600,000
Cash/Capital Lease Financed										
System Control and Data Acquisition	\$	350,000							\$	350,000
Automated Meter Reading				300,000						300,000
Utility Billing Information System								100,000		100,000
Geographical Information System						500,000				500,000
Safe Drinking Water Act Amendment Response	_	200,000		300,000		200,000	200,000	200,000		1,100,000
Total Cash/Capital Leased Financed	\$	550,000	\$	600,000	\$	700,000	\$ 200,000	\$ 300,000	\$	2,350,000
<b>Total Capital Projects</b>	\$	14,350,000	\$	17,650,000	\$	14,700,000	\$ 25,850,000	\$ 13,400,000	\$	85,950,000

^{(1) -} Proposed 2006 capital budget.



# **Projected Operating Results**

Projected operating results for the City for Fiscal Year 2005 to Fiscal Year 2009 are shown in Table 2. Future revenues are projected based on increases in water rates as adopted by the City Council and/or anticipated by wholesale contracts. Future expenses are projected based on increases associated with inflation, customer growth, and increased personnel costs. Interest earnings are calculated based on funds held by the City and the reinvestment rate.

		ity of Norfo Water S ected Ope	Sys	tem	s			
					iscal Year Endi	ng J		
Description		2005 (1)		2006	2007		2008	2009
Revenues								
Water Rates - Present Rates (2) Water Rates - Increases (2) Transfers from/(To) Rate Stabilization Virginia Beach True-up Other Revenue (3) Interest Income (4)	\$	62,922,022 3,617,546 4,723,783 (4,693,687) 2,800,000 298,547	\$	62,925,658 7,294,667 - - 2,828,000 217,234	\$ 65,458,746 9,145,229 - - 2,856,280 496,967	\$	65,462,386 11,021,732 - - 2,884,843 584,726	\$ 65,466,029 12,913,618 - - 2,913,691 668,548
Total Revenue	\$	69,668,211	\$	73,265,559	\$ 77,957,222	\$	79,953,687	\$ 81,961,886
<b>Operating Expenses</b>								
Labor (5) FICA (5) Retirement (6) Health Care (7) Materials and Services (5) Chemicals (8) Electricity (8) Contract Services (5) Equipment (5)	\$	11,105,766 798,285 1,350,927 850,718 2,789,036 2,067,000 2,749,560 7,030,241 157,587	\$	11,438,939 822,234 1,404,964 935,790 2,872,707 2,129,029 2,832,072 7,241,148 162,315	\$ 11,782,107 846,901 1,461,163 1,029,369 2,958,888 2,434,375 3,238,249 7,458,382 167,184	\$	12,135,570 872,308 1,519,610 1,132,306 3,047,655 2,507,427 3,335,424 7,682,133 172,200	\$ 12,499,637 898,477 1,580,394 1,245,537 3,139,085 2,582,671 3,435,516 7,912,597 177,366
<b>Total Operating Expenses</b>	\$	28,899,120	\$	29,839,198	\$ 31,376,618	\$	32,404,633	\$ 33,471,280
Net Revenue Available for Debt Service	\$	40,769,091	\$	43,426,361	\$ 46,580,604	\$	47,549,054	\$ 48,490,606
Revenue Bond Debt Service								
Prior Bonds 2005 Revenue Bonds WRBAN Interest (9) Future Parity Bonds (10)	\$	20,291,059 - 223,437 -	\$	20,293,374 1,114,587 78,750	\$ 20,293,565 1,396,256 105,000	\$	20,290,032 1,397,169 - 2,707,127	\$ 20,297,225 1,392,644 - 2,707,098
Total Revenue Bond Debt Service	\$	20,514,496	\$	21,486,711	\$ 21,794,821	\$	24,394,328	\$ 24,396,967
Revenue Bond Debt Service Coverage Ratio	_	1.99		2.02	2.14		1.95	1.99
Net Revenue Available for GO Debt Service	\$	20,254,595	\$	21,939,650	\$ 24,785,783	\$	23,154,726	\$ 24,093,639
General Obligation Debt Service	\$	7,355,907	\$	6,983,671	\$ 5,850,307	\$	5,249,220	\$ 5,025,361
GO Debt Service Coverage Ratio		2.75		3.14	4.24		4.41	4.79
Combined Debt Service Coverage Ratio	=	1.46		1.53	1.68		1.60	1.65
Net Available for Other Purposes	\$	12,898,688	\$	14,955,979	\$ 18,935,476	\$	17,905,506	\$ 19,068,278

Table 2

^{(1) -} Budget.

^{(2) -} From Table 17.

^{(3) - 2005} Budget increased by the rate of inflation annually.

^{(4) -} Based on the average fund balances and the reinvestment rate.

^{(5) - 2005} Budget increased at a rate of 3.0% annually.

^{(6) - 2005} Budget increased at a rate of 4.0% annually.

^{(7) - 2005} Budget increased at a rate of 10.0% annually.

^{(8) - 2005} Budget increased at the rate of inflation and water sales annually.

^{(9) -} Bond Anticipation Note 2004 and \$4.5 million of Water Revenue Bond Anticipation Notes on January 1, 2006.

^{(10) - \$39} million in 2007 and \$45 million in 2009. Debt service estimates provided by PFM.

# **Opinions**

Based on our analyses and studies and the considerations and assumptions set forth in this report, we are of the opinion that:

- The City is currently in compliance with water quality regulations under the Safe Drinking Water Act.
- The City is currently in compliance with the requirements of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the "Bioterrorism Act").
- The funds available from the 2005 Bonds, additional borrowings, together with other money available to the City, including the release of amounts on deposit in the Debt Service Reserve Fund as a result of substituting such amounts with surety bonds will be sufficient to complete the design and/or construction of the Water System Capital Improvements.
- The City's revenues from water service, including rate increases approved by Ordinance 41,047, § 14 and anticipated change in wholesale rates per the contracts will be sufficient during the period Fiscal Year 2005 through Fiscal Year 2009 to pay the costs of operation and maintenance expenses, pay debt service, meet coverage requirements, pay a portion of the Water System Capital Improvements and maintain required reserve balances.
- The Water System is currently operated and maintained in a manner consistent with sound engineering practices to assure continuous operation of the Water System and compliance with permits and other regulations. The City's current planning and construction practices will assure adequate facilities for maintenance of the Water System, compliance with future regulatory requirements and growth of the Water System.
- The amount of Net Revenues received during the twelve month period ended June 30, 2004, as adjusted as permitted by Section 5.3(h)(3) of the Bond Indenture satisfies the revenue covenant contained in Section 9.4 of the Bond Indenture for the twelve month period ending June 30, 2004 taking into account the maximum amount of principal and interest payments due on (i) Bonds and Parity Indebtedness then Outstanding and (ii) the 2005 Bonds.

# **Section 1**

# **The City**

#### Introduction

Norfolk, Virginia (the "City) is a city of some 241,000 residents and more than 100 diverse neighborhoods. It is the cultural, educational, business and medical center of the Hampton Roads region, hosts the region's international airport, hosts the world's largest Naval facility, and is one of the busiest international seaports on the East Coast of the United States. The City's water system (the "Water System") is a major regional provider of water to retail and wholesale customers currently serving approximately 800,000 people or approximately 10% of the population of the Commonwealth of Virginia.

The Water System receives water from a series of eight City-owned water supply reservoirs with a storage capacity of over 15.2 billion gallons. These reservoirs are supplemented by two river intakes at the Blackwater and Nottoway Rivers. There also are four ground water wells owned by the City that are used in time of other shortages.

Water is treated in two City owned water treatment plants (WTP), the Moores Bridges and 37th Street water treatment plants. The Moores Bridges plant has a rated capacity of 108 mgd (maximum day) and provides water primarily to the eastern two-thirds of the City and the City of Virginia Beach (Virginia Beach). The 37th Street plant has a rated capacity of 28 mgd (maximum day) and serves water primarily to the western one-third of the City. Flow from both treatment plants also serves the facilities of the United States Department of the Navy (Navy) and the urban northeastern section of the City of Chesapeake (Chesapeake). The City also provides raw water to a U.S. military facility in the City of Portsmouth (Portsmouth).

The City is responsible for the distribution of treated water to customers within the City through a system comprised of two ground level storage tanks with pumping stations, two elevated water storage tanks and over 800 miles of transmission and distribution lines. The City also provides treated water under contract to the city limits of Virginia Beach and Chesapeake and to the gates of the Naval facilities. These customers in turn maintain their own distribution systems. The City also will provide raw water to the Chesapeake after construction of a new water treatment plant and facilities by Chesapeake with deliveries planned to start in 2006.

Table 3 displays selected operating and financial data regarding the City's water operations as of June 30, 2004.

Table 3 City of Norfolk, Virginia Water System Selected Operating and Financial Data					
(Fiscal Year Ending June 30, 20	04)				
Number of Customers (1)	63,298				
Average Daily Water Sales (2)	63.6 mgd				
Peak Day Demand	81.8 mgd				
Plant Capacity	136.0 mgd				
Water Sales Revenue	\$60,964,284				
Net Investment in Plant	\$455,402,186				
Total Net Assets	\$168,552,761				
Ratio of Current Assets to Current Liabilities (3)	0.91				
Debt/Net Asset Ratio (4)	62.70%				

- (1) Retail Customers and Wholesale Meters
- (2) Retail and Wholesale Sales
- (3) Current Assets Divided by Current Liabilities.
- (4) Debt / (Debt + Net Assets). Excludes 2005 Bonds.

# **Service Area**

The City's current service area covers approximately 334 square miles and includes the City, Virginia Beach and the urban northeastern section of Chesapeake, as well as Naval installations in the City, Virginia Beach and Portsmouth. This service area is part of what is commonly known as Southside Hampton Roads. Virginia Beach and the City have the first and second largest populations respectively among cities in Virginia, while Chesapeake is the third largest city in Virginia. While there has been some growth in the City's service area, overall water sales have been fairly constant over the last five years. While the City is experiencing redevelopment and some change in historical customer base as traditional land uses locally evolve from light commercial and industrial to multi- and single-family residential units, this has not had an impact on water sales due to conservation measures and the use of more efficient plumbing fixtures.

# **Organization**

The City operates under the City Council-Manager form of government. Policymaking and legislative authorities are vested in the governing City Council, which consists of a mayor and six-member council. The council members serve four (4) year staggered terms. The City Council appoints the City Manager. The City Council is the only body with authority to set water rates charged by the City.

Table 4 provides the names of the Council Members, their terms and occupations.

Table 4 City of Norfolk, Virginia Water System City Council								
Name	Position	Term Beginning	Term Ending	Occupation				
Paul D. Fraim	Mayor	1986	2006	Attorney				
Anthony L. Burfoot	Councilor	2002	2006	College Faculty Member				
Daun S. Hester	Councilor	1996	2008	Education				
Paul R. Riddick	Councilor	1992	2006	Business Owner				
Donald L. Williams	Councilor	2002	2006	Real Estate				
Barclay C. Winn	Councilor	2000	2008	Business Owner				
W. Randy Wright	Councilor	1992	2006	Business Owner				

The Department of Utilities (the "Department") operates and maintains the City's water and wastewater systems and oversees the Water and Wastewater Enterprise Funds. The Water Utility Fund currently employees approximately 290 individuals who are grouped into seven (7) operating divisions.

A brief description of the each division is as follows:

- Director's Office Responsible for the overall administration of the Department including human resources, public information and grants management.
- Water Production Responsible for the operation and maintenance of water treatment and finished water storage facilities. Maintains raw and finished water pump stations and raw water transmission mains. Reviews any encroachments or activities on the reservoirs.
- Water Quality Responsible for assuring that the Water System continues to meet federal and state water quality regulations through laboratory analysis and reporting to regulatory agencies. Manages raw water resources.
- Water Distribution Responsible for the operation and maintenance of over 800 miles of water mains. Also responsible for repair, replacement and installation of fire hydrants and valves and the detection of leaks in the distribution system. Provides routine flushing of water mains and the installation of service main extensions.
- Engineering Responsible for engineering design, construction oversight, contract management and development of the Water System Capital Improvement program. Also responsible for underground utility identification under the Miss Utility program, and other engineering functions.
- Accounting and Budget Responsible for financial oversight, budgeting and expenditure tracking for all phases of utility operations. Coordinates with the City's Finance Department to maintain consistency in financial reporting and record keeping.

■ Water Accounts – Responsible for handling customer service inquiries concerning billing and establishment and disconnection of services. Coordinates the reading of meters. Also responsible for billing and collection activities in conjunction with joint billing arrangement with Hampton Roads Sanitation District.

A summary of the City management team and their experience is as follows:

## Regina V. K. Williams, City Manager

Regina V. K. Williams assumed the post of Norfolk City Manager in January 1999. Her responsibilities include the supervision of the administrative operations of the City and the preparation of its annual budget. She served as City Manager for the City of San Jose, California for five years and previously served as Assistant City Manager for five years. Prior to serving in San Jose, Mrs. Williams was Deputy City Manager and Chief of Staff for the City of Richmond, Virginia. In 1982, Mrs. Williams was appointed by then Virginia Governor Charles Robb as the first female and first African American to be State Director of Personnel and Training. In 1991, she was inducted as a fellow into the National Academy of Public Administration (NAPA). In 1988, Mrs. Williams was elected to a vice-presidency of the Board of Directors for the International City-County Management Association (ICMA). She was awarded designation of manager of the year in September 2002 by ICMA. Mrs. Williams also served as the President of the National Forum of Black Public Administrators in 1995-96 and is a founder and former President of the Richmond, Virginia Chapter of the Conference of Minority Public Administrators. She earned her Bachelor of Science degree from Eastern Michigan University, Ypsilanti, Michigan and a Masters degree in Public Administration from Virginia Commonwealth University, Richmond, Virginia.

#### Steven G. de Mik, Director of Finance

Steve de Mik commenced his tenure as Director of Finance on September 1, 2000. At the direction of the City Manager, he is responsible for identifying strategic opportunities for the City in the policy areas of taxation, financial management, fiscal policy development and instruction and economic development. In addition, he is responsible for the administration of the financial affairs of the City, which include cash management and investments, debt management, financial accounting and reporting, payroll, procurement, risk management, administration of retiree benefits and City Storehouse operations. Mr. de Mik came to the City from Knox County, Tennessee where he served as the Deputy Director of Finance and Administration. His other work experiences include service with the State of Tennessee Comptroller of the Treasury, Chipman and McMurray, Certified Public Accountants and Public Financial Management, Inc. Mr. de Mik earned a Bachelor of Science degree in Accounting and Business Administration from Southwest Baptist University, Bolivar, Missouri. He also is a licensed Certified Public Accountant.

A summary of the Department's management team and their experience is as follows:

#### Kristen M. Lentz, P.E., Director of Utilities

Kristen M. Lentz, P.E. was appointed Acting Director of Utilities in September 2001 and Director of Utilities in March 2002. Ms. Lentz is a registered professional engineer and has approximately twenty-six years of professional experience. Prior to her appointment, Ms. Lentz held the positions of Assistant Director of Public Works for the City of Norfolk for nine years and has served as City Engineer and Director of Engineering and Utilities for the City of Poquoson, Virginia. She holds a Bachelor of Science degree in Civil Engineering from Old Dominion University. She also serves on the Old Dominion University Civil and Environmental Engineering Visiting Council.

# Stephanie M. Tinsley, CPA, Assistant Director of Utilities

Stephanie M. Tinsley, CPA, began serving as the Assistant Director of Utilities in November 2004. Ms. Tinsley is a licensed Certified Public Accountant and has over twelve years of professional experience. She previously held positions as the Manager of Budget and Accounting for the City of Norfolk's Public Works Department, Director of Finance and Administration for the Chesapeake Redevelopment and Housing Authority, and several managerial positions in the private sector. She holds a Master of Business Administration from the College of William and Mary.

# Peter S. Fortin, P.E., Engineering Manager

Peter S. Fortin, P.E., has served as the Department's Engineering Manager since 1987. Mr. Fortin is a registered professional engineer and has approximately twenty-seven years of professional experience. He has previously held positions as Vice President of Operations at Silcock Engineering, Engineering Manager for the City of Houston's Water and Wastewater Systems and Operations Manager for the City of Houston's Water System. He holds a Bachelor of Science degree in Civil Engineering from the University of Massachusetts, in Lowell, Massachusetts.

## Vernon R. Land, Water Quality Manager

Vernon R. Land has served as the Department's Water Quality Manager since 1991. Mr. Land previously served as a Bacteriologist and Water Chemist II, and has been with the Department since 1981. He holds a Bachelor of Science degree in Biology from Old Dominion University. Mr. Land has served on the Virginia American Waterworks Association Water Quality Committee and has completed training in bacteriological laboratory analysis and water plant operations.

#### Richard M. Saul, Water Production Manager

Richard M. Saul has served as the Department's Water Production Manager since 1989. Mr. Saul previously served as a Water Chemist and Senior Water Chemist and has been with the

Department since 1976. He holds a Bachelor of Science degree in Chemistry and a Master of Science Degree in Civil Engineering from Old Dominion University. Mr. Saul has also received training in Water Utility Vulnerability Assessments and Response and Preparation for Terrorism and Weapons of Mass Destruction.

# Eric G. Tucker, Operations Manager

Eric G. Tucker, was appointed the Department's Operation Manager in September 2002. Mr. Tucker has over twenty years of professional experience and held management positions with PEMCCO, Incorporated, Thyssen Elevator Company and URS and engineering positions with Camp Dresser & McKee and CDI Marine Company. Mr. Tucker holds a Bachelor of Science Degree from Virginia State University in Industrial Technology and a Master of Business Administration degree from Averett University in Danville, Virginia.

## Dwayne H. Coston, CPA, Manager of Budget and Accounting

Dwayne H. Coston, CPA, the Department's Manager of Budget and Accounting, has worked for the Department since 1993. Prior to his appointment as Manager of Budget and Accounting in July 2000, Mr. Coston served as Utility Supervising Accountant and acting Enterprise Controller. He has approximately twenty years of professional experience in public and private accounting and has held managerial positions in the health care and construction industries. He holds a Bachelor of Science degree in Accounting from Norfolk State University, Norfolk, Virginia, and is a licensed Certified Public Accountant.

# J. Nicole Riddick, Customer Service Manager

J. Nicole Riddick began serving as Customer Service Manager in March 2001. Ms. Riddick has over fifteen years of professional experience and held management positions as a Customer Service Supervisor and Project Manager at QVC, Customer Relations Supervisor at Canon ITS and Customer Dispute Resolution Supervisor for Chemical Bank and First Chicago National Bank. She holds a Bachelor of Science degree from North Carolina A&T State University and will complete her MPA from Old Dominion University in 2005.

The Water Fund currently budgets for 285 full-time employees and 2 part-time employees. City management considers employee relationships to be good.

## **Facilities**

The City owns, operates and maintains all reservoirs, pump stations, water treatment plants, and distribution storage and distribution mains within its service territory. The City owns and operates eight reservoirs, two river intakes, four wells and two treatment plants for the production of potable water. Water is distributed via approximately 800 miles of pipelines.

# **Rates and Charges for Service**

Rates for retail water services and Chesapeake finished water are established by City Council ordinance. The City maintains rates to meet the requirements under the Bond Indenture. See the section in the Official Statement entitled "Appendix C - Definitions and Summary of Certain Provisions of the Indenture" for a summary of the Revenue Covenant and definitions of Revenue and Operating Expenses.

The City has maintained rates for services that have been sufficient to provide payment for Operating Expenses, Debt Service costs (including coverage), repairs and provide a margin for capital additions to the Water System. During the historical five-year period studied herein, and including Fiscal Year 2005, the City increased rates for retail water service in the City and Chesapeake two (2) times. Wholesale rates for Virginia Beach and the Navy are adjusted based on the terms and conditions under the wholesale contracts between the City and Virginia Beach and the Navy. The summary of the rates for the Water System from Fiscal Year 2000 through Fiscal Year 2005 is provided in Table 5.

Table 5 City of Norfolk, Virginia Water System Summary of Water Rate Changes (1)										
			<b>1</b> 7:	uainia	N			avy -		
Year (2)	Re	tail (3)		rginia ach (4)		avy - folk (5)		rginia ach (6)	Chesa	peake (7)
2000	\$	2.51	\$	1.40	\$	2.27	\$	2.71	\$	2.59
2001		2.51		1.41		2.33		2.71		2.59
2002		2.51		1.47		3.25		3.83		2.59
2003		2.51		1.50		3.38		3.93		2.59
2004		2.76		1.34		3.04		3.04		2.84
2005		3.01		1.35		3.31		3.31		3.09

- (1) Rates in \$ per ccf.
- (2) Fiscal Year ending June 30th.
- (3) A one dollar (\$1.00) per month service charge also applies.
- (4) Estimated average cost based on average daily sales of 31.86 mgd.
- (5) Estimated average cost based on average daily sales of 6.75 mgd.
- (6) Estimated average cost based on average daily sales of 2.00 mgd.
- (7) Finished water rate.

The City Council, on May 20, 2003, passed Ordinance Number 41,047, § 14 which provided for rate increases for retail customers and finished water for Chesapeake into perpetuity. The ordinance specified rates through June 30, 2006 and annual increases of three and one-half percent (3.5%) over the previous year's rate beginning July 1, 2006, and each July 1 thereafter, until amended. A summary of the retail and Chesapeake finished water rates for Fiscal Year 2004 through Fiscal Year 2006 is provided in Table 6.

•	Table 6 of Norfolk, Virginia Water System opted Rates (\$/ccf)	
Fiscal Year Ending June 30th	Norfolk Retail	Chesapeake Finished Water
2004	\$ 2.76	\$ 2.84
2005	3.01	3.09
2006	3.26	3.34

# **Connection Charges**

The City imposes one type of connection charge to provide new service to retail customers, which is a meter and service installation charge. The neter and service installation charge covers the City's actual cost for placement of a meter and service line to the new retail customer. A summary of the City's current meter and service connection charges is provided in Table 7.

Table 7 City of Norfolk, Virginia Water System Service and Water Taps for New Retail Connections								
Meter Size Charge								
3/4 inch and meter	\$525							
1 inch and meter	750							
Over 1 inch and meter	Actual Cost							
Meter only for 3/4 inch tap	125							
Meter only for 1 inch tap	150							
Meter only for 1 1/2 inch tap	225							
Meter only for 2 inch tap	275							
Meter only for over 2 inch tap	Actual Cost							

# **Wholesale Contracts**

The City currently supplies wholesale finished water service to Virginia Beach, Chesapeake and the Navy. Sales under the City's wholesale raw water contract with Chesapeake are expected to

begin on July 1, 2006. Water is supplied to the City's wholesale customers in accordance with the individual service contracts. The service contract with Virginia Beach expires in 2030. The service contract with Chesapeake for raw water expires in 2042 and the sale of finished water is not subject to a contract. The service contract to provide wholesale service to the Navy is for five years. The City also has a contract with Portsmouth for the sale of emergency raw water. See Section 2 of the report for a more detailed discussion of the terms and conditions of the wholesale contracts. As of the date of this report, nothing has come to the attention of the City that would cause it to believe that the terms and conditions of the contracts will be materially changed in the near future.

# **Water Rate Comparison**

The City's charges for water service are comparable with other water purveyors in the region, also known as the South Hampton Roads area. In some instances, the rates are higher or lower than other water purveyors depending on the type of customer and amount of water usage.

Table 8 provides a comparison of water rates for various municipalities in Virginia and nationwide.

# Table 8 City of Norfolk, Virginia Water System - Typical Monthly Bill Comparison

(As of December 1, 2004)

		Typical Monthly Bills					
		Residential		Commercial			
	Population	5/8"	5/8"	1"	1"		
City	(1)	10 CCF	10 CCF	10 CCF	20 CCF		
Norfolk	234,403	\$31.07	\$31.07	\$31.07	\$61.14		
Virginia							
Fairfax County	993,424	\$15.97	\$17.27	\$21.57	\$32.04		
Virginia Beach	425,257	29.95	29.95	32.80	59.36		
Chesapeake	199,184	40.50	40.50	40.50	69.25		
Richmond	197,790	23.63	29.12	42.79	52.29		
Newport News	180,150	31.45	31.45	33.68	59.88		
Hampton	146,437	31.28	31.28	33.43	59.63		
Portsmouth	100,565	27.44	27.44	30.44	52.89		
James City County (2)		\$32.03	\$32.03	\$34.55	\$60.75		
Other Cities							
Detroit, MI	951,270	\$15.26	\$15.26	\$19.28	\$31.86		
Baltimore, MD	651,154	16.82	16.82	22.43	33.64		
Seattle, WA	563,374	32.20	26.90	28.75	48.75		
Denver, CO	554,636	15.60	13.96	13.96	24.50		
Pittsburgh, PA	334,563	47.63	47.05	52.75	93.36		
Riverside, CA	255,166	10.58	12.68	15.98	23.68		

⁽¹⁾ City populations are from the U.S. Census 2000 (www.census.gov).

⁽²⁾ No population data available.

# **Section 2**

# **Wholesale Contracts**

# Introduction

The City maintains wholesale contracts or water service agreements with the City of Chesapeake (Chesapeake), the City of Virginia Beach (Virginia Beach), the City of Portsmouth (Portsmouth) and the United States Department of the Navy (Navy). These contracts and agreements set forth the amount of water to be sold, rate setting procedures, metering points, dispute resolution and other matters.

The descriptions of the contracts and agreements set forth below are brief outlines or summaries of certain of their provisions. Such outlines and summaries do not purport to be complete, and reference should be made to each respective contract or agreement. Copies of the contracts and agreements may be obtained from the City for a full and complete statement of their provisions.

Capitalized terms used in this section shall have the same meaning as such terms are defined in the applicable water service contract or agreement.

# **City of Chesapeake – Finished Water**

The City sells Chesapeake wholesale finished water at various delivery points for service to the northeastern section of Chesapeake. Sales in Fiscal Year 2004 averaged 3.14 mgd which represents approximately five percent (5%) of the Water System's total metered water consumption. Rates are set by ordinance of the City Council. The current rate as set by Ordinance Number 41,047, § 14 is \$3.09 per ccf (see Table 6). The sale of finished water to the Chesapeake is not subject to a contract.

# **City of Chesapeake - Raw Water**

In December of 2002, the City entered in to a raw water sales contract with Chesapeake for the sale of some of the City's surplus raw water to Chesapeake. The contract specifies the terms and conditions of the sale of raw water, rates, termination provisions and dispute resolution. It is assumed that raw water sales will average seven mgd starting July 1, 2006 which would be approximately ten percent (10%) of the Water System's total metered water consumption.

**Term of Contract:** The contract is for a term beginning January 1, 2003, and ending December 31, 2042. The Start-up Date is July 1, 2006 (unless otherwise approved by the City in a written response to a written request from Chesapeake for a different Start-up Date).

**Delivery and Sale of Surplus Raw Water:** Upon and following the Start-up Date, the City agrees to sell and deliver to Chesapeake and Chesapeake agrees to accept the Target Amount

transmitted to the extent practical at a uniform flow rate. The initial Target Amount shall be seven (7) mgd.

In the event that the metered amount of Surplus Raw Water delivered in a Billing Month is less than the Target Amount times the number of days in the Billing Month, Chesapeake may request, in addition to the Target Amount, that an amount up to such Shortfall be delivered in subsequent Billing Months.

Chesapeake may request to temporarily or permanently increase the Target Amount and if the City determines that it can supply such request, the City at its sole discretion, may increase the Target Amount. Chesapeake may request to temporarily decrease the Target Amount and, upon agreement by the City, the Target Amount shall be decreased.

**Plan, Construction and Operations:** Chesapeake shall be solely responsible for the drawings, specifications, designs, descriptions and calculations for the construction, installation, and operation of the Raw Water Delivery System which provides for delivery of raw water to the Chesapeake WTP. Construction shall not be deemed fully or conditionally accepted by the City until the City provides acceptance in writing. As of the date of this report, the raw water pipeline and water treatment plant were slightly ahead of planned construction schedule.

Water Rates and Charges: The initial Water Rate is ninety-five cents (\$0.95) per thousand gallons of Surplus Raw Water sold, with such rate being effective through June 30, 2003. Beginning on July 1, 2003, and upon each July 1 thereafter, the then existing Water Rate shall be adjusted based on the change in the Consumer Price Index, but in no instance shall the Water Rate decrease.

Beginning on August 1, 2006, Chesapeake shall make monthly payments for the metered amount of Surplus Raw Water delivered. The minimum amount of Surplus Raw Water used in the calculation of the amount owed to the City shall be seven (7) mgd multiplied by the number of days in the Billing Month.

To the extent that the average daily flow for a Billing Month exceeds 0.75 mgd over the amount of Surplus Raw Water scheduled to be delivered, then Chesapeake shall pay the City an amount as if 0.75 mgd of Surplus Raw Water were delivered to Chesapeake regardless as to whether or not the Surplus Raw Water was actually delivered.

The amount of Shortfall delivered in any Billing Month shall be included in the total volume of Surplus Raw Water delivered for the calculation of that Billing Month's monthly payment; provided, however, that the Water Rate charged for any amount of delivered Shortfall shall be the Water Rate in effect for the Billing Month during which such Shortfall was initially determined.

**Reductions and Curtailments:** The City may reduce the Target Amount of Surplus Raw Water delivered to Chesapeake only if one or more of the following conditions occur:

- Decrease in Surplus Water Supply
- Facility or Equipment Failure
- Drought
- Contamination
- Force Majeure

**Termination by the City:** The City may terminate the contract if one or more of the following events of default occurs: (a) Chesapeake does not pay in full within sixty (60) days from the date of a receipt for payment, (b) Chesapeake has willfully breached the terms of the contract which significantly affects the operation of the contract, and (c) construction of the Raw Water Delivery System is not fully complete within five (5) years of the established Start-up date of July 1, 2006.

**Termination by Chesapeake:** Chesapeake may terminate the contract if: (a) the City has willfully breached any term of the contract which significantly affects the operation of the contract or (b) the City delivers less than the difference of the Target Amount minus 0.75 mgd for more than six (6) consecutive Billing Months.

**Pre-existing Surplus Treated Water Purchase Arrangement.** Chesapeake has been purchasing surplus treated water from the City for over thirty (30) years. No term of the raw water contract shall reduce or waive either party's rights of obligations regarding the City's sale to Chesapeake of surplus treated water. As part of the raw water contract, the City agrees to continue selling and Chesapeake agrees to continue purchasing no less that two (2) mgd of surplus treated water as long as the raw water sales contract is effective.

# **United States Department of the Navy**

In 1981, the City entered into a utility service contract for water service with the Department of the Navy for the delivery of water to the gates of the various Navy installations in the City and outside the City. The contract was modified effective July 1, 2003 to establish treated water rates applicable to the Naval facilities located in Norfolk and Virginia Beach. Sales to the Navy averaged 5.55 mgd in the Fiscal Year ending June 30, 2004, which represents approximately nine percent (9%) of total metered water consumption of the Water System.

Rates and Charges: The Navy agrees to pay the rates as shown in Table 9 for treated water delivered to the point of delivery as contained in the Water Services Specifications (as defined in the contract) during the term of the Contract.

Table 9 City of Norfolk, Virginia Water System Navy Treated Water Rates						
Fiscal Year Ending	Rate (\$/ccf) (1)					
2004	\$3.04					
2005	\$3.31					
2006	\$3.58					
2007	\$3.71					
2008	\$3.84					

⁽¹⁾ The rates in the contract are in (\$ per Kgal).

The rates set forth above will be fixed rates applied to the actual amount of water delivered to the points of delivery. These will be the final rates for the periods and there shall be no adjustments to the rates based on a true-up cost of service study.

Notwithstanding the above rates, in the event that the City Council acts to amend the uniform retail water rate ordinance as adopted for the for the period of Fiscal Year 2004 through Fiscal Year 2008, the Navy agrees to pay the amended City uniform retail water rate plus ten percent (10%).

Prior to the July 1, 2003 contract modification with the Navy, the City's contract required a biennual true-up of rates. The Navy has requested that the City apply the 2004 fixed rates and has claimed that \$3,500,000 be rebated as a result of the application of the 2004 rates. The City has reviewed the claim of the Navy and believes that the claim is without merit.

**Disputes Clause:** The contract is subject to the Contract Disputes Act of 1978 (Act). Except as provided in the Act, all disputes arising out of the contract shall be resolved as specified in the contract. The Contracting Officer's decision will be final unless appealed by the City or a suit is filed by the City as provided in the Act.

In the event of a disagreement, the City shall continue to provide water service and the Navy shall continue to pay the City at the then existing rate. After a determination of the final rates, the Navy shall promptly pay from that point forward such rates that are determined to be just and reasonable.

# **City of Virginia Beach**

In 1993, the City entered into a Water Services Contract with Virginia Beach for the storage, treatment and conveyance of Virginia Beach's Lake Gaston and Stumpy Lake water. The contract was last amended in 2001. The City treated on average 35.39 mgd of Virginia Beach water in Fiscal Year ending June 30, 2004, which represents approximately fifty six percent (56%) of the total metered water consumption of the Water System. See the appendix in the

Official Statement entitled "Appendix E - Summary of the Norfolk-Virginia Beach Water Services Contract" for a more detailed description of the contract terms and conditions.

**Term:** The Water Services Contract is in effect until June 30, 2030, unless terminated earlier.

Water Treatment, Delivery Services and Obligations: Under the water services contract, the City must receive and store Virginia Beach Water in locations satisfactory to both parties, transport the water through the City's raw water system, treat the water, provide clear well storage, pump and transport the treated water to the metered points of delivery for the Virginia Beach distribution system, and perform all related acts to provide treated water to Virginia Beach. The Water Services Contract is a water services contract, not a contract for the sale of treated water, and the right of Virginia Beach to receive treated water under the Water Services Contract is dependent on Virginia Beach's ability to provide Virginia Beach Water to a discharge point satisfactory to Virginia Beach and the City.

Except as otherwise provided in the Water Services Contract, the City must deliver treated water to the Virginia Beach distribution system in such amounts as required by Virginia Beach, up to a total annual average amount of 45 mgd, but not to exceed 0.9 times the maximum sustainable rate of Gaston water which Virginia Beach is capable of delivering to the City for Virginia Beach's use, plus 1.8 mgd for Stumpy Lake water. If the Stumpy Lake contract capacity increase option is exercised, the maximum permissible total annual average amount stated above shall increase by 1.8 mgd to 46.8 mgd.

Virginia Beach is obligated to supply additional Virginia Beach Water above the Virginia Beach current monthly demand if requested by the City but is not required to supply an amount of Virginia Beach Water in any consecutive 36-month period in excess of the amount of treated water delivered to Virginia Beach under the Water Services Contract during the same period adjusted for certain losses.

Rates and Charges: The annual rates charged by the City for rendering treated water service under the terms of the Water Services Contract are based upon the utility basis of cost of service principles established by the American Water Works Association. Under such principles, Virginia Beach is charged for treated water service in a manner that recovers its allocable share of operation and maintenance expense, depreciation expense and return on rate base associated with the Water System.

Within six (6) months after the end of the second Fiscal Year, the City must complete and submit to Virginia Beach a true-up schedule of rates and annual billings applicable to the previous two (2) Fiscal Years which reflects an allocation of costs of service based on actual cost and experience incurred by the Water System as shown in the audited books and records of the City. The current true-up amount due Virginia Beach is \$4,693,687 for Fiscal Year 2003. The City is crediting the true-up amount to Virginia Beach in equal monthly payments during Fiscal Year 2005. The next true-up calculation will occur at the end of Fiscal Year 2005.

**Termination:** The contract may be terminated by the City and the City of Virginia Beach under a number of different conditions as described more fully in the appendix of the Official Statement entitled "Appendix E - Summary of the Norfolk-Virginia Beach Water Services Contract."

# **City of Portsmouth**

In 2002, the City entered into a contract with the City of Portsmouth for sale of emergency raw water. Portsmouth has constructed and tested the necessary improvements to convey raw water to its treatment facility but no water has been sold as of the date of this report.

**Delivery and Sale of Temporary Surplus Raw Water:** Following the Start-up Date, the City shall endeavor to deliver and sell to Portsmouth up to ten (10) mgd of Temporary Surplus Raw Water. Temporary Surplus Raw Water means the difference between the Safe Yield of the City's Water System, as expressed in millions of gallons per day (mgd) of raw water after adjusting for losses, and the total of (i) the amount of raw water required to supply the persons and entities in the City with treated water, (ii) the amount of raw water required to supply raw and treated water to the City's United States government customers and (iii) the amount of raw water required to supply raw and treated water to the City's other existing and future customers under fixed term contracts.

**Delivery Point, Plan, Construction and Operation:** It will be the responsibility of Portsmouth to finance, design, construct and operate the Raw Water Delivery System. The City will provide for written approval and acceptance of the Raw Water Delivery System after assurance that the improvements will provide for proper and safe integration with the City's water system. All system construction and testing has been completed and the City provided Portsmouth with written approval on September 24, 2004.

**Water Rates and Charges:** The rate of the Temporary Surplus Raw Water sold pursuant to the contract shall be 39.4 cents plus 9.0 cents for pumping cost (a total of 48.4 cents) per thousand gallons of Temporary Surplus Raw Water delivered to the Delivery Point.

**Term of Contract - Termination:** Either party on ten days' written notice may terminate the contract.

# **Section 3**

# **Water Quality**

# Introduction

Regulatory guidance is established for assuring safe drinking water for all water systems that serve the public under regulatory promulgation from the U.S. Environmental Protection Agency (USEPA), as stipulated under the Federal Safe Drinking Water Act (SDWA) of 1974 and its 1986 and 1996 amendments. The law outlines a series of monitoring standards and operational criteria related to source water protection, treatment, distribution system compliance, and reporting. A summary of the relevant rules and their related compliance standards is outlined in Table 10.

## Table 10 City of Norfolk, Virginia Water System

#### **Summary of Existing National Primary Drinking Water Regulations**

Regulation	Requirements
Phase I, Phase II, Phase V Regulations	<ul><li> Written Monitoring Plan</li><li> Monitoring</li></ul>
Radionuclides	Monitoring
Surface Water Treatment Rule	Monitoring chlorine residuals where surface water enters distribution system
Interim Enhanced Surface Water Treatment Rule	Monitoring turbidity where treated surface water leaves the filters
Source Water Protection Program	Wellhead Protection Plan
Filter Backwash Rule	• Monitoring
Total Coliform Rule	<ul><li>Written Plan</li><li>Monitoring</li></ul>
Stage I D/DBP Rule	<ul><li>Written Plan</li><li>Monitoring</li><li>Monitoring THM4/HAA5</li></ul>
Asbestos Rule	Monitoring distribution system
Lead and Copper Rule	<ul><li> Monitoring</li><li> Treatment Optimization</li></ul>
CCR and Public Notification Rules	<ul><li>Annual Reports</li><li>Reporting as needed</li></ul>

Under these rules, the City maintains a regular sampling schedule for monitoring a series of potential contaminants, including:

- Sixty-eight (68) regulated primary inorganic and organic compounds;
- Thirteen (13) regulated secondary contaminants;
- Fifty-three (53) unregulated organic compounds;
- Twenty-two (22) compounds and physical parameters of interest; and
- Seventy (70) additional unregulated organic compounds.

In addition, the City prepares quarterly water quality reports, annual consumer confidence reports, oversees operator training and certification, and conducts extensive cross connection identification and control programs.

#### **Compliance**

Within the regulatory process, public water suppliers in Virginia are responsible for taking all reasonable precautions to assure the water delivered to their customers does not exceed maximum contaminant levels (MCLs) for all primary regulated compounds and related standards for secondary contaminates established under law. Moreover, all such suppliers are required to provide reasonable assurance that water system facilities are free of public health hazards, as required under Federal law.

In the last five years, the City has had no violations of the state's safe drinking water standards for all regulated compounds and parameters and is currently in compliance with all requirements under the SDWA. In addition, the City has removed nearly all-lead related components within its distribution system and has had a compliant record over this same period with regards to lead and copper control.

The City continues to maintain an aggressive water quality compliance program and is in an ongoing position to preserve regulatory compliance standards and consumer confidence throughout its water treatment and distribution systems.

#### **Operator Certification**

The City employs a number of certified individuals to maintain and operate its water treatment plants. Table 11 outlines the City's current staff certification with regards to water treatment operations.

Table 1	1									
City of Norfolk, Virginia										
Water Sys	Water System									
Summary of Water System C	Summary of Water System Operator Certifications									
Water Treatment Certification Level	No. of Certified Staff									
Level III Operators	7									
Level I and II Operators	17									

#### **Future Regulations**

There are several proposed and pending regulations that could have an impact on the cost of existing water supplies utilized by the City. The most prominent issue is that of the potential establishment of revised rules (the stage 2 disinfections and disinfections by-products rule) governing regulated disinfection by-product, including lowered standards for triholmethanes (THMs) and haloacetic acids (HAAs). The City, however, has taken a number of steps recently to prepare for complying with the revised rules and is poised to meet the anticipated new standards. In particular, the City has moved away from using free chlorine as the primary disinfectant at the Moores Bridges and 37th Street WTPs, relying instead on chloramines (i.e. a combination of chlorine and ammonia) which have a much lower potential for the formation of THMs and HAAs. In addition, the City has recently switched its primary coagulant from aluminum sulfate to ferric sulfate, which has resulted in even lower disinfection by-products. These two changes will ensure continued compliance with the Stage 2 regulation. Table 12 is a summary of the proposed future regulations.

Table 12 City of Norfolk, Virginia Water System Summary of Anticipated Future National Drinking Water Regulations										
Action Date Parameter(s)										
Aldicarb	Proposed Promulgated Effective	2004 2006 2008	Aldicarb Aldicarb sulfoxide Aldicarb sulfone							
Radon	Promulgated Effective	2004 2008	Radon							
LT2 ESWTR	Promulgated Effective	2006 2008	Cryptosporidium							
Groundwater Rule (GWR)	Promulgated Effective	2004 2008	Viruses E.coli							
Total Coliform Rule (TCR) (Revised)	Proposed Promulgated Effective	2006 2007 2010	Total Coliforms Fecal Coliforms E. coli							
D/DBP Stage II	Proposed Promulgated Effective	2003 2005 2008	TTHM HAA5							

The City actively monitors the status of the proposed regulations and plans for changes in operations and required Water System Capital Improvements to assure compliance when the regulations become effective.

Another major area of public interest has been pharmaceutical contaminants that may arise in association with traditional municipal wastewater discharge. Such contaminants may find

themselves into the source of municipal drinking water supplies, especially for those cities that rely on local streams and rivers for their resource supply. The U.S Environmental Protection Agency has yet to establish either permanent or interim standards for such compounds. Hence, the potential impact on City operations is difficult to determine, but the City's monitoring and compliance is sufficiently adaptable to employ compliant sampling and treatment programs in the event such new standards are promulgated.

In general, the City is poised to meet all existing and future anticipated federal and state safe drinking water standards.

#### **Security Compliance**

The events of September 11, 2001, exposed the need to strengthen the security of critical infrastructure of the United States. An early effort in assessing the status of infrastructure security was the Public Health, Security, and Bioterrorism Preparedness and Response Act of 2002 (the "Bioterrorism Act"), which President Bush signed into law on June 12, 2002. The Bioterrorism Act first required communities serving a population of 3,300 or more to conduct an assessment of the vulnerability of their water system to a terrorist attack or other intentional acts intended to disrupt the provision of safe and reliable drinking water. For systems serving a population of 100,000 or more, the deadline for completing and submitting the Vulnerability Assessment to the USEPA was March 31, 2003. The Bioterrorism Act also required the follow-up activity of completing a Water System Emergency Response Plan within six months of submitting the Vulnerability Assessment. The City submitted a Vulnerability Assessment on January 30, 2003 and updated its Emergency Response Plan on March 27, 2003.

#### **Section 4**

#### **Water System**

#### Introduction

This section provides a description of the City's current Water System and review of the planned capital improvements to be financed with the 2005 Bonds. A discussion of the planning and operation and maintenance procedures of the City is also provided to determine the ability to provide continued water service. EES/HDR representatives undertook a facilities inspection in September 2004 to determine the operating condition of the existing facilities and met with the engineering and operations personnel to review planning and operating procedures.

#### **Water Supply**

#### **Source Water Supply**

The City's raw water supply system consists of two river intake/pump stations, three reservoirs in western Suffolk and eastern Isle of Wight County known collectively as the "Western Reservoir System," five reservoirs in or near Norfolk called the "In-Town Reservoirs," and four groundwater supply wells which discharge into Lake Prince and Lake Burnt Mills (components of the Western Reservoir System).

The City-owned river intakes/pump stations are on the Nottoway and Blackwater Rivers and discharge into pipelines terminating at the headwaters of Lake Prince in the Western Reservoir System. The river pump stations transport raw river water to Lake Prince when their water levels drop below 97 percent capacity. Both pump stations are in good condition. With the Lake Gaston system on line, the City has the water services contract responsibility to effectively manage the use of the City's two pump stations and Virginia Beach's Lake Gaston Pump Station so that minimal water loss from spillway overflows occurs in the Western Reservoirs.

The City's four deep groundwater supply wells have a total capacity of 16 mgd. These wells, typically used only during periods of reduced supply, are in relatively good condition.

The Western Reservoir System consists of Lake Prince, Lake Burnt Mills, and Western Branch Reservoir and have capacities of approximately 3.6, 3.2 and 6.4 billion gallons, respectively. Water from Lake Prince and Lake Burnt Mills overflows their spillways or can be released directly into the Western Branch Reservoir. Overflow from Western Branch enters the Nansemond River and is carried to the James River, Hampton Roads, and the Chesapeake Bay. The dams for these reservoirs are in an adequate condition. However, each dam will require construction of parapet walls on top of the earthen dams to create additional flood water control volumes, and their spillways will have to be modified to comply with current federal and Virginia state dam safety regulations. Design of the proposed modifications is underway and will add the

desired capability to pass the appropriate design flood (i.e. probable maximum flood) without storm water breaching the dams. Spillway and associated dam rehabilitation are scheduled from Fiscal Year 2006 through Fiscal Year 2010.

Water quality at Lake Prince and Western Branch is enhanced by an aeration system. The aeration system maintains oxygen concentrations at the bottom of the reservoir which prevents the release of manganese from the sediments. This helps to reduce disinfection by products at the treatment plant by avoiding the need to pre-chlorinate the water for manganese control. The aeration system results in reduced costs of water treatment since pre-chlorination is avoided at the treatment plant. The components of the aeration system are in good condition and scheduled for periodic rehabilitation in Fiscal Year 2010 and for approximately 10 years thereafter.

The City's raw water storage system also includes the In-Town Reservoirs, consisting of Lake Lawson, Lake Smith, and Little Creek Reservoir in Virginia Beach; and Lake Whitehurst and Lake Wright in the City of Norfolk. The total capacity of the In-Town Reservoirs is approximately 2.0 billion gallons. Canals connect the remaining In-Town Lakes allowing water to flow by gravity to the Moores Bridges WTP. In-Town Lakes raw water is presently used in combination with the Western Reservoir raw water to meet water demands placed on the system. The City has made significant dam, spillway, and dredging improvements to the In-Town Reservoirs, resulting in adequate conditions for these facilities.

The collective reservoir systems are under the supervision of Utilities' Division of Water Quality for environmental control. This group oversees the enforcement of ordinances, rules and regulations governing the lakes, such as building setbacks on adjacent private property, storm water drainage into lakes, and recreational use of lakes.

#### **Raw Water Pumping and Transmission**

Raw water from the Nottoway and Blackwater Rivers is lifted via pump stations of the same name and delivered via 33.9 miles of 42-inch transmission main that spills into an open-channel system that forms the source for the Western Reservoir system. Facility improvements for the river source pump stations are scheduled for Fiscal Year 2008. The original transmission mains, however, remain in adequate condition.

Waters from the Western Reservoirs are then lifted via the Western Branch Pump Station to separate mains that serve the Moores Bridge WTP and the 37th Street WTP. In addition, water from Lake Prince is lifted via the Lake Prince Pump Station which also serves the Moores Bridges WTP. A new Western Branch Pump Station was recently constructed, with an installed capacity of 112 mgd (and a facility design capacity of 152 mgd). The new Western Branch Pump Station which was built above the local flood plan replaces an old 60 mgd pump station that was demolished. The combination of the Western Branch and Lake Prince Pump Stations are able to deliver raw water at a maximum day rate to meet the design capacity at both the Moores Bridges and 37th Street WTPs.

Raw water serving the Moores Bridges WTP is delivered via a 30 mile pair of 48-inch transmission mains. These mains are relatively new in age and are in good condition. Delivery

along these mains is enhanced by two Simonsdale Booster Pump Stations, #1 and #2. In an emergency, water being transported to the Moores Bridges WTP may be diverted around Pump Station #1 to the 37th Street WTP. Recent improvements to Pump Station #1 include pump replacement and upgrades to the control and ventilation systems, while Pump Station #2 is a new addition. Both pump stations are in good condition.

The Western Branch Pump Station also serves the 37th Street WTP via a 39 mile long pair of 36-inch transmission mains. These mains are in need of repair and replacement along areas of continued leakage. The City has established a repair schedule that will replace about twenty-five percent (25%) of the paired mains overall length (i.e. critical sections) over the next 30 years, which will provide for continued reliable operations. Replacement will be relatively expensive as portions of the repaired pipeline will have to replace sections that are structurally elevated or of environmental significance such as waterways or protected wetlands.

#### **Water Treatment Facilities**

Moores Bridges WTP

The initial treatment plant at the Moores Bridges WTP was constructed in the late 1890s. Additions and improvements have been made to the plant over the years resulting in a hydraulic capacity of 108 mgd. The plant receives water directly from the In-Town Reservoirs through an intake structure at Lake Wright, and from the Western Reservoir System through two parallel 48-inch pipelines. Moores Bridges is a conventional water treatment plant incorporating chemical addition and rapid mixing, flocculation, coagulation and sedimentation, rapid-sand filtration, and disinfection. The plant produces a high quality, finished water. The plant has a newly constructed laboratory with current certifications for thirty-four parameters from the Virginia Department of Health.

The WTP capacity was expanded by 30 mgd in 1998, allowing the City to meet obligations under the Services Contract with Virginia Beach. The renovations included a new sulfuric acid feed system for raw water alkalinity adjustments, and the installation and testing of a new central preventive maintenance computer system that integrates facilities throughout the Division of Water Production. Other recent modifications also included the conversion of primary disinfection from chlorine gas to sodium hypochlorite and the formation of chloramines (in combination with ammonia), along with the elimination of pre-chlorination. These steps have greatly reduced the potential formation of undesired disinfection by-products. Installation of five emergency standby generators along with two separate Virginia Power lines provides adequate primary and emergency back-up power to support the plant.

With the hydraulic expansion of Moores Bridges, the City is maximizing its use of high quality raw water from the Western Reservoir System, while minimizing its use of In-Town Lakes' water.

In addition, the plant has solids handling facilities consisting of chemical conditioning, sludge gravity thickeners and two sludge dewatering diaphragm presses. Dewatered cake solids are transported to regional landfills. The City has a contract with the Southeastern Public Service

Authority (SPSA) specifying that ninety-five percent (95%) of the City's solid waste, including dewatered cake solids, be delivered to SPSA's landfills. Since SPSA benefits by using the water utility residuals as ground cover for its other solid wastes, the City has negotiated reduced disposal charges for its delivered dewatered cake solids.

Overall, the Moores Bridges WTP has been maintained in good operating condition. The City's treated water meets current water quality standards and is frequently tested at the plant's laboratory. The plant continues to meet all current regulatory requirements. All equipment and structures are regularly inspected and maintained, and are well kept. These improvements may include the installation of plate settlers or other technology in sedimentation units 7 and 8 and rehabilitation of the plant's clarifiers.

#### 37th Street WTP

The 37th Street WTP was initially placed in service in 1922, and extensively renovated and expanded in 1942. The plant has a rated treatment capacity of 28 mgd. Raw water is supplied to the plant by two 36-inch pipelines from the Western Reservoir System. The plant is operated at a relatively constant production rate and provides an excellent quality of water.

The 37th Street WTP has a conventional purification process consisting of chemical addition and rapid mixing, flocculation, coagulation and sedimentation, rapid-sand filtration, and disinfection. Recent renovations to the flocculation and sedimentation basins include concrete repairs and new flocculation and sludge collection equipment. As with the Moores Bridges WTP, the 37th Street facility has eliminated the use of free chlorine (i.e. chlorine gas) as its primary form of disinfection, opting instead for the use of hypochlorite followed by ammonia to form chloramines. The changes have included the construction of sodium hypochlorite and ammonia storage and feed systems. A sulfuric acid feed system has also been installed for pH adjustment should the need arise. In 2003, the City spent \$20 million for the first phase of improvements to the 37th Street WTP including a new chemical feed building new control room, electrical system upgrades and a new emergency generator.

The facility also maintains a fairly new sludge handling unit consisting of sludge receiving basins and transfer pumps, a polymer conditioning system, three rotary drum sludge thickeners, and a filtrate treatment system. The thickened solids are pumped through dedicated pipelines to the Virginia Initiative Plant, a nearby wastewater treatment facility owned by the Hampton Roads Sanitation District (HRSD), for co-disposal with the wastewater treatment plant sludge. The filtrate is treated by flocculation and sedimentation and discharged to the HRSD sanitary sewer system.

The 37th Street WTP is in adequate condition and produces an excellent quality of finished water. Its filters are adequate, settling tanks are good, and high service pumping is adequate. At the 37th Street plant, the finished water clear wells lie below the sedimentation basins. Minor contamination of the finished water could occur if the sedimentation basins were to ever leak but they are regularly checked and maintained to insure integrity. The City is aware of the associated potential hazards and regularly inspects the basins for leakage and none have occurred. The current configuration, however, does not meet current state standards for water

treatment plant operations, but the City has been given an operating variance by the State since the regulation was enacted after construction of the plant. The City intends to and is required to remedy this situation in the next round of improvements to this facility scheduled in Fiscal Year 2010.

All current water quality standards are being met, water samples are frequently tested in the plant's well equipped laboratory or at the Moores Bridges laboratory, and records are well kept. Phased improvements of the 37th Street plant are scheduled for Fiscal Year 2006 through Fiscal Year 2010 and then extending into the subsequent five year period of Fiscal Year 2011 through Fiscal Year 2015. These improvements will essentially rehabilitate the existing 28 mgd capacity with new technology and address reconfiguration of the finished water clearwells.

#### **Finished Water Storage and Distribution**

In Fiscal Year 2004, peak day water delivery was 81.8 mgd, while average day totaled 68.1 mgd. In serving that demand, the City maintains two ground level storage tanks with pump stations, two elevated water storage tanks, and approximately 833 miles of water pipelines. There also are about 16,200 water valves and 4,100 hydrants on the distribution system.

Finished water storage is actually comprised of both on-site storage at the water treatment plants and storage located within the distribution system. A summary of that storage is outlined in Table 13.

Table 13 City of Norfolk, Virginia Water System Summary of Finished Water Storage										
Location	Capacity									
Moores Bridges WTP										
4 Tanks	24 MG									
Clearwell	2.3 MG									
37 th Street WTP										
1 Tank	4 MG									
Clearwell	6 MG									
Distribution System Tanks										
Little Creek (1 tank and pump station)	5 MG									
Chesterfield Heights (1 tank and pump station)	3 MG									
Elevated Storage (2 tanks @ 1 MG each)	2 MG									

The distribution system's storage tanks and associated pump stations are in good condition.

Pipelines within the distribution system range in size from 2 to 54 inches in diameter and are comprised mainly of cast iron material, with lesser inventories of PVC and other pipe materials.

The City maintains a fairly aggressive annual pipe repair and replacement program, especially in renovating the older sections of the distribution system. The distribution system also faces a valve aging problem and the City has begun an annual renewal and replacement program to address this issue.

The City also maintains an adequate meter testing and replacement program. Master meters monitoring production and wholesale service are calibrated and repaired annually and local retail meters are replaced every 15 years. According to the American Water Works Association (AWWA), the optimum unaccounted for water level for efficient distribution systems should be less than 10% of volume of water produced. Nationwide, AWWA reports that water utilities average about 15% unaccounted for water. The Water System's Fiscal Year 2004 unaccounted for water level was approximately 10% which is within AWWA's acceptable level and below the nationwide average. The City also regularly conducts a leak detection program for the distribution system designed to locate and repair all leaks in the system.

Flow tests also are conducted on fire hydrants which are color coded by flow capacity for the fire department. Fire hydrants are being replaced with breakaway type hydrants according to a scheduled replacement program. In addition, the City has implemented a valve exercise program to systematically uncover paved-over valve covers and to periodically exercise all valves in the system to keep these assets functional. All known lead service lines also have been replaced in the system, and any additional lead service lines are replaced as they are found.

In addition, the City operates an adequate centralized Water Distribution Maintenance Facility located at 1316 Ballentine Boulevard. This facility contains administrative offices and records storage; a parts and materials storehouse; a pipe, valve and hydrant storage yard; a meter and hydrant repair shop; and equipment storage facilities for work crews. Facilities maintenance appears to be a well-run operation. Training is provided to the maintenance crews on trench safety, working in confined spaces safety, and distribution system maintenance.

The City also maintains an administrative office staff, which provides for customer services, accounting, billing, and financial planning and project management.

Overall, the distribution network is in adequate condition and the City is providing for adequate maintenance and repair programs to help address identified deficiencies.

#### **Capital Improvement Plan**

The City's current Water System Capital Improvement plan totals \$85.95 million for the period Fiscal Year 2005 through Fiscal Year 2009. The City also anticipates spending an additional \$375 million for capital improvements to the Water System over the subsequent 25-year period. The major near-term projects consist of upgrades to the raw water reservoir dams and spillways, raw water transmission pipelines, distribution system piping, and phased rehabilitation of the 37th Street Water Treatment Plant. These improvements will be followed by subsequent funding for continued replacement of critical portions of the raw water transmission mains, rehabilitation of the raw water pump stations at the river intakes, continued phased rehabilitation of the 37th Street

WTP, upgrades to the Moores Bridges WTP, and continued repair and replacement of distribution system. These improvements will allow the City to provide continuous operation of the system and meet regulatory requirements. A summary of the capital improvement plan for the next five years is provided in Table 14.

# Table 14 City of Norfolk, Virginia Water System Capital Improvement Projects (1)

	Fiscal Year Ending June 30th											
Project		2005		2006		2007		2008		2009	<u> </u>	Total
Bond Financed Projects												
37th Street WTP Design & Construction			\$	1,000,000	\$	1,500,000					\$	2,500,000
Lake Whitehurst Culverts						500,000						500,000
Western Branch PS Backup Power		3,000,000										3,000,000
Blackwater River PS Upgrades								1,075,000				1,075,000
Nottoway River PS Upgrades								1,075,000				1,075,000
Raw Water Pipelines		750,000		1,750,000		5,000,000				5,000,000		12,500,000
Security/Vulnerability		500,000								100,000		600,000
Transmission Mains				3,000,000		3,000,000		2,500,000		2,500,000		11,000,000
Distribution Mains		9,550,000		4,000,000		4,000,000		5,000,000		5,000,000		27,550,000
Dams & Spillways				7,300,000				16,000,000		500,000		23,800,000
<b>Total Bond Financed Projects</b>	\$	13,800,000	\$	17,050,000	\$	14,000,000	\$	25,650,000	\$	13,100,000	\$	83,600,000
Cash/Capital Lease Financed												
System Control and Data Acquisition	\$	350,000									\$	350,000
Automated Meter Reading				300,000								300,000
Utility Billing Information System										100,000		100,000
Geographical Information System						500,000						500,000
Safe Drinking Water Act Amendment Response		200,000		300,000		200,000		200,000		200,000		1,100,000
Total Cash/Capital Leased Financed	\$	550,000	\$	600,000	\$	700,000	\$	200,000	\$	300,000	\$	2,350,000
<b>Total Capital Projects</b>	\$	14,350,000	\$	17,650,000	\$	14,700,000	\$	25,850,000	\$	13,400,000	\$	85,950,000

^{(1) -} Proposed 2006 capital budget.



A summary description of the major capital improvement projects is provided below.

#### **Raw Water Reservoirs Dams and Spillway Improvements**

Modifications will be undertaken to accommodate federal and state dam safety standards requiring the ability to pass the probable maximum flood at each of the Class I raw water reservoir dams. These improvements will require raising of the dam crest heights and expansion of spillway capacities. The anticipated costs for these improvements total \$29.8 million and are scheduled for Fiscal Year 2006 through Fiscal Year 2010, with an additional minor rehabilitation of \$4 million by Fiscal Year 2030.

#### **37th Street Treatment Plant Improvements**

This facility is to undergo major rehabilitation and technology upgrade under a schedule of phased improvements that begin in Fiscal Year 2006 and extend into Fiscal Year 2015. These improvements will include rehabilitation of all major process units and the possibility of a change from conventional treatment to advanced membrane filtration, as well as upgrades to supporting pumping and piping facilities. The improvements will rehabilitate and renew the existing 28 mgd plant capacity at a schedule of \$2.5 million for the period Fiscal Year 2006 through Fiscal Year 2009. The long-term capital plan for this facility also includes an additional \$38 million to be employed for the period of Fiscal Year 2010 through Fiscal Year 2035.

#### **Moores Bridges Treatment Plant Improvements**

This facility is to undergo capacity expansion by Fiscal Year 2020, including \$15 million for the renovation of sedimentation units and new clarifiers. These funds also may provide additional hydraulic capacity to accommodate potential new water sales to surrounding communities.

#### **Raw Water Pumping and Transmission Improvements**

Initial upgrades to the Nottoway and Blackwater River pump stations are scheduled for Fiscal Year 2008 at an estimated cost of \$2.15 million, with more substantial rehabilitation scheduled between Fiscal Year 2016 and Fiscal Year 2025 at an estimated cost of \$31.5 million. Added upgrades also are scheduled for the Western Branch pump station totaling \$3 million in Fiscal Year 2005 and \$1 million in Fiscal Year 2010.

Improvements also are being planned for phased replacement of critical sections of the twin 36-inch transmission mains that extend from the Western Branch Pump Station to the 37th Street WTP. Initial plans are to replace between four and five miles of pipeline at an estimated cost of \$12.5 million for the period Fiscal Year 2005 through Fiscal Year 2009. An additional eight to ten miles of pipeline will be replaced between Fiscal Year 2010 and Fiscal Year 2035 at an estimated cost of \$35 million.

#### **Transmission and Distribution Pipeline Improvements**

The City is undertaking an aggressive renewal and replacement of its distribution system piping, with the primary goal of replacing all pipes over 50 years old. This capital program is expected to spend about \$38.6 million from Fiscal Year 2005 through Fiscal Year 2009. Continued long-term renewal and replacement of the distribution system is expected to cost an additional \$194.8 million for the period extending from Fiscal Year 2010 through Fiscal Year 2035.

#### **Groundwater Well Improvements**

Improvements to each of the City's four groundwater wells are expected to occur over the next 20 years. An estimate of \$8 million for these upgrades has been scheduled for the period Fiscal Year 2021 through Fiscal Year 2025.

#### **Section 5**

#### **Historical and Projected Operating Results**

#### Introduction

Presented in this section is a review of the City's Water System financial operating results. A review of the City's Water System Funds and budgeting is provided. A discussion of the City's historical and projected customers, water sales and operating results is presented. The City's funding projections for capital improvements also is presented.

#### **Water System Funds**

Pursuant to the Bond Indenture, the City maintains the following funds:

■ Revenue Fund –

The City will collect and deposit in the Revenue Fund all Revenue derived from the ownership and operation of the Water System. No later than the fifth Business Day before the end of each month, the City will make transfers to the other funds.

Operating Fund –

The City shall transfer from the Revenue Fund to the Operating Fund, an amount to pay for Operating Expenses and maintain a balance equal to one-sixth of the annual Operating Expenses budgeted to be paid from the Operating Fund.

■ Bond Fund –

The City shall transfer from the Revenue Fund an amount such that the funds available on the Interest and Principal Payment Date will be equal to the interest and principal payment on the Outstanding Bonds.

■ Parity Debt Service Fund –

The City shall transfer from the Revenue Fund an amount such that the funds available on the Interest and Principal Payment Date will be equal to the interest and principal payment on the Outstanding Parity Debt.

■ Debt Service Reserve Fund –

The City shall transfer from the Revenue Fund an amount such that the funds in the Debt Service Reserve Fund will equal the Debt Service Reserve Requirement.

■ Subordinate Debt Service Fund –

The City shall transfer from the Revenue Fund an amount such that the funds in the Subordinate Debt Service Fund will be adequate to provide for payment when due of the principal and interest on the Subordinate Debt.

■ Repair and Replacement Reserve Fund –

The City shall transfer from the Revenue Fund an amount to pay for renewals and replacement to the Water System and maintain a balance equal to the Replacement Reserve Requirement established pursuant to the Bond Indenture. The Replacement Reserve Requirement was initially established at \$1,000,000. The current Replacement Reserve Requirement is \$1,000,000. The current balance in the Repair and Replacement Reserve Fund is \$2,000,000.

■ Rate Stabilization Fund –

The City shall transfer from the Revenue Fund an amount such as to maintain a fund balance equal to the Rate Stabilization Requirement. The current Rate Stabilization Requirement as established by the City pursuant to the Bond Indenture is zero (0). However, the City as a general practice maintains balances in the Rate Stabilization Account to provide funds for true-ups under the wholesale contacts.

■ General Reserve Fund –

The City shall transfer from the Revenue Fund all funds remaining after funding of the above-mentioned accounts to the General Reserve Fund. Such funds may be used for any lawful purpose determined by the City.

■ Project Fund –

The City shall deposit the proceeds from the sale and issuance of any Bonds and any future Bonds to the Project Fund.

#### **Budgeting**

Annually, the City prepares a budget for the Water System that conforms to state law and the legal requirements of the City Charter and is approved by the City Council. For the purpose of cost accounting, the City maintains a number of different accounts, which follow along operating units (e.g. water treatment, distribution, etc.).

#### **Metered Accounts**

During the five-year period, 2000 to 2004, the number of metered accounts served by the City increased from 61,749 to 63,298. This represents an annual growth of 1% per year. For the projection period of Fiscal Year 2005 through Fiscal Year 2009, the City has assumed increases in total metered accounts of zero percent (0%) per year reflecting the built out nature of the City's service area. The historical number of metered accounts and projected number of metered accounts for the various classes is shown in Table 15.

Table 15
City of Norfolk, Virginia
Water System
<b>Historical and Projected Metered Accounts</b>

	Historical (Fiscal Year Ending June 30th)										
Customer Class	2000	2001	2002	2003	2004						
Norfolk Retail	60,886	61,034	61,670	61,837	62,292						
Norfolk Fire Protection	580	588	597	612	645						
Virginia Beach	24	24	24	24	24						
US Navy	62	62	62	59	59						
Chesapeake - Finish Water	6	6	6	6	6						
Chesapeake - Raw Water	-	-	-	-	1						
Other	191	209	238	254	271						
<b>Total Metered Accounts</b>	61,749	61,923	62,597	62,792	63,298						

	Projected (Fiscal Year Ending June 30th)										
<b>Customer Class</b>	2005	2006	2007	2008	2009						
Norfolk Retail	62,292	62,292	62,292	62,292	62,292						
Norfolk Fire Protection	645	645	645	645	645						
Virginia Beach	24	24	24	24	24						
US Navy	59	59	59	59	59						
Chesapeake - Finish Water	6	6	6	6	6						
Chesapeake - Raw Water	1	1	1	1	1						
Other	271	271	271	271	271						
<b>Total Metered Accounts</b>	63,298	63,298	63,298	63,298	63,298						

#### **Water Sales and Revenues**

The City receives approximately 95% of its operating revenue from water service charges. Additional revenues are obtained through interest earnings and miscellaneous fees.

As shown in Table 16, during the five-year period, 2000 through 2004, water sales ranged from a low of 29,843,962 ccf to a high of 31,038,994 ccf. Overall, there has been little to no growth on the Water System due to the built out nature of the City's service area. The City's revenues from sales of water have increased from approximately \$59.2 million in Fiscal Year 2000 to approximately \$62.9 million in Fiscal Year 2004. Rate increases have been the primary source of this trend.

The projection of water service revenues at present rates for the period of Fiscal Year 2005 through Fiscal Year 2009 is based on the projected number of customers and water sales and 2004 rates. The increase in revenue due to rate increases for the City's retail customers and Chesapeake finished water customers is based on the rate increase approved by the City Council

of \$0.25/ccf in 2005, \$0.24/ccf in 2006 and 3.5% annual increases thereafter. Rates for Virginia Beach were only assumed to increase based on increases in operation and maintenance expenses and no increase in return or depreciation was included. Raw water rates to Chesapeake were assumed to increase based on the rate of inflation pursuant to the Raw Water Sales Contract. Navy rates were increased pursuant to the contract with the Navy through 2008 with 2009 rates equivalent to the City's retail rate plus 10%. Details are provided in Table 17.

Table 16 City of Norfolk, Virginia Water System Historical Water Sales and Revenue										
				Historical (Fi	iscal Year Endi	ng .	June 30th)			
Customer Class		2000		2001	2002	8	2003		2004	
Water Sales - ccf										
Norfolk Retail		9,877,208		9,664,754	9,634,982		9,520,129		9,423,790	
Virginia Beach		16,256,697		16,371,958	16,280,530		16,678,555		17,317,821	
US Navy		2,722,321		2,565,188	2,440,258		3,005,851		2,715,547	
Chesapeake - Finish Water		1,614,870		1,473,825	1,465,533		1,698,368		1,536,642	
Other	_	38,868		14,940	22,659		17,194		45,194	
<b>Total Water Sales</b>		30,509,964		30,090,665	29,843,962		30,920,097		31,038,994	
Rates - \$/ccf										
Norfolk Retail - Unit Cost	\$	2.51		2.51	2.51		2.51	\$	2.76	
Norfolk Retail - Service Charge (1)		1.00		1.00	1.00		1.00		1.00	
Norfolk Fire Protection (2)		40.70		40.70	40.70		40.70		40.70	
Virginia Beach (3)		1.40		1.41	1.47		1.50		1.34	
US Navy (3)		2.37		2.42	3.38		3.51		3.04	
Chesapeake - Finish Water		2.59		2.59	2.59		2.59		2.84	
Other		0.77		0.77	0.77		0.77		0.77	
Revenues										
Norfolk Retail - Unit Cost	\$	24,791,792	\$	24,258,533	\$ 24,183,805	\$	23,895,524	\$	26,009,660	
Norfolk Retail - Service Charge		730,632		732,408	740,040		742,044		747,504	
Norfolk Fire Protection		315,000		315,000	315,000		315,000		315,000	
Virginia Beach		22,759,376		23,084,461	23,932,379		25,017,833		23,205,880	
US Navy		6,453,456		6,199,693	8,254,347		10,537,655		8,255,263	
Chesapeake - Finish Water		4,182,513		3,817,207	3,795,730		4,398,773		4,364,063	
Other	_	30,101		11,570	17,548		13,316		35,000	
Total Revenue	\$	59,262,870	\$	58,418,872	\$ 61,238,849	\$	64,920,145	\$	62,932,370	

^{(1) -} Service Charge per meter month.

^{(2) -} Fire protection bill on meter size - number represents cost per meter month.

^{(3) -} Average unit cost. Actual rates per water service contracts.

		City of No	rfo	lk, Virgini ystem	а				
Pi	rojec			ales and R	ev	enue			
				Projected (F	isca	ıl Year Endi	ng J	une 30th)	
Customer Class		2005		2006		2007		2008	2009
Water Sales - ccf									
Norfolk Retail		9,423,790		9,423,790		9,423,790		9,423,790	9,423,790
Virginia Beach		17,317,821		17,317,821		17,317,821		17,317,821	17,317,821
US Navy Chesapeake - Finish Water		2,715,547 1,536,642		2,715,547 1,536,642		2,715,547 1,536,642		2,715,547 1,536,642	2,715,547 1,536,642
Chesapeake - Philsh Water  Chesapeake - Raw Water		1,330,042		1,330,042		3,415,775		3,415,775	3,415,775
Other		28,049		28,329		28,613		28,899	29,188
Total Water Sales		31,021,849		31,022,129		34,438,188		34,438,474	34,438,763
Present Rates (\$/ccf)									
Norfolk Retail - Unit Cost	\$	2.76	\$	2.76	\$	2.76	\$	2.76	\$ 2.76
Norfolk Retail - Service Charge (1)		1.00		1.00		1.00		1.00	1.00
Norfolk Fire Protection (2)		40.70 1.34		40.70		40.70		40.70	40.70
Virginia Beach (3) US Navy (3)		3.04		1.34 3.04		1.34 3.04		1.34 3.04	1.34 3.04
Chesapeake - Finish Water		2.84		2.84		2.84		2.84	2.84
Chesapeake - Raw Water		0.74		0.74		0.74		0.74	0.74
Other		0.77		0.77		0.77		0.77	0.77
Revenue at Present Rates									
Norfolk Retail - Unit Cost	\$	26,009,660	\$	26,009,660	\$	26,009,660	\$	26,009,660	\$ 26,009,660
Norfolk Retail - Service Charge		747,504		747,504		747,504		747,504	747,504
Norfolk Fire Protection		317,930		321,349		324,767		328,186	331,605
Virginia Beach		23,205,880		23,205,880		23,205,880		23,205,880	23,205,880
US Navy Chesapeake - Finish Water		8,255,263 4,364,063		8,255,263 4,364,063		8,255,263 4,364,063		8,255,263 4,364,063	8,255,263 4,364,063
Chesapeake - Raw Water		-		-		2,529,450		2,529,450	2,529,450
Other	_	21,722		21,939		22,159		22,380	22,604
<b>Total Revenue at Present Rates</b>	\$	62,922,022	\$	62,925,658	\$	65,458,746	\$	65,462,386	\$ 65,466,029
Rate Increase - \$/ccf									
Norfolk Retail - Unit Cost	\$	0.25	\$	0.50	\$	0.61	\$	0.73	\$ 0.85
Norfolk Fire Protection		-		-		-		-	-
Virginia Beach		0.01		0.02		0.03		0.04	0.05
US Navy		0.27		0.54		0.67		0.80	0.93
Chesapeake - Finish Water Chesapeake - Raw Water		0.25 0.01		0.50 0.02		0.62 0.03		0.74 0.04	0.87 0.05
Other		0.03		0.06		0.09		0.12	0.15
Rate Increase Revenue									
Norfolk Retail - Unit Cost	\$	2,326,168	\$	4,711,895	\$	5,748,512	\$	6,879,367	\$ 8,010,222
Norfolk Fire Protection		-		-		-		-	-
Virginia Beach		173,178		346,356		519,535		692,713	865,891 2 525 450
US Navy Chesapeake - Finish Water		733,198 384,161		1,466,395 768,321		1,819,416 952,718		2,172,438 1,137,115	2,525,459 1,336,879
Chesapeake - Raw Water						102,473		136,631	170,789
Other	_	841		1,700		2,575		3,468	4,378
Total Rate Increase Revenue	\$	3,617,546	\$	7,294,667	\$	9,145,229	\$	11,021,732	\$ 12,913,618
Total Rate Revenue	\$	66,539,568	\$	70,220,325	\$	74,603,975	\$	76,484,118	\$ 78,379,647

Table 17

^{(1) -} Service Charge per meter month. (2) - Fire protection bill on meter size - number represents cost per meter month.

^{(3) -} Average unit cost. Actual rates per water service contracts.

## Water System Capital Improvement Financing and Fund Balances

The City has projected its Water System Capital Improvements financing requirements for Fiscal Years 2005 through Fiscal Year 2009 will result in cash flow funding requirements totaling approximately \$76 million which will be financed with the proceeds of the 2005 Bonds, the release of amounts on deposit in the Debt Service Reserve Fund as the result of substituting such amounts with Surety Bonds, and Additional Bonds.

In its planning process, the City specifies Water System Capital Improvements in the year that projects are to begin. Many of the capital improvement projects require multiple years to complete construction. To determine the need for funds for the purposes of cash flow expenditures, the City assumes twenty-five percent (25%) of the proceeds of new Bonds will be spent in the first year, fifty percent (50%) in the second year and twenty-five percent (25%) in the third year. Therefore, the amount of actual cash flow expenditures for capital improvements shown in Table 18 for each year will not match the amount of capital expenditures which are approved by the City Council as shown in Table 14.

Table 18 provides a summary of the sources and uses of funds for capital expenditures for Fiscal Year 2005 through Fiscal Year 2009 and ending fund balances for the various funds held by the City in accordance with the Bond Indenture. As shown, in addition to the 2005 Bonds, the City will require an additional borrowing of approximately \$39.5 million in Fiscal Year 2007 and \$45 million in Fiscal Year 2009 to finance the Water System Capital Improvements.

# Table 18 City of Norfolk, Virginia Water System Capital Improvement Financing Cash Flow and Fund Balances

	Projected (Fiscal Year Ending June 30th)										
Description		2005		2006		2007		2008		2009	
Project Fund											
Sources of Funds Beginning Balance Bond Par Amount (1) Debt Service Reserve Fund Release (2) Interest Earnings	\$	918,718 22,933,974 12,500,000 60,165	\$	11,114,241 4,500,000 - 60,175	\$	920,784 39,000,000 - 194,567	\$	18,535,914 - - 195,928	\$	1,056,842 45,000,000 - 269,383	
<b>Total Sources</b>	\$	36,412,857	\$	15,674,416	\$	40,115,351	\$	18,731,842	\$	46,326,225	
Uses of Funds Cost of Issuance (3) Transfer to Debt Service Reserve Redemption of WRBANs FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 Prior Year Projects	\$	503,050 - 17,000,000 3,500,000 3,450,000 - - - 845,566	\$	150,000 - 1,750,000 6,900,000 4,262,500 - - 1,691,132	\$	758,871 - 4,500,000 - 3,450,000 8,525,000 3,500,000 - 845,566	\$	- - - 4,262,500 7,000,000 6,412,500 - -	\$	844,790 - - - 3,500,000 12,825,000 3,275,000	
Total Uses	\$	25,298,616	\$	14,753,632	\$	21,579,437	\$	17,675,000	\$	20,444,790	
<b>Ending Project Fund Balance</b>	\$	11,114,241	\$	920,784	\$	18,535,914	\$	1,056,842	\$	25,881,435	
End of Fiscal Year Water System Fund Balances	S										
Operating Fund Debt Service Reserve Fund (4) Repair and Replacement Fund Rate Stabilization Account Project Fund General Fund	\$	6,100,035 - 2,000,000 - 11,114,241 13,002,041	\$	6,265,048 2,000,000 - 920,784 13,947,671	\$	6,520,897 - 2,000,000 - 18,535,914 18,657,281	\$	6,699,804 2,000,000 - 1,056,842 22,206,672	\$	6,886,635 2,000,000 - 25,881,435 26,590,042	
<b>Total Fund Balances</b>	\$	32,216,317	\$	23,133,503	\$	45,714,092	\$	31,963,318	\$	61,358,112	

^{(1) -} Includes net premium on 2005 Bond. The Bond issue in 2006 is assumed to be a WRBAN which will be refunded in 2007.

^{(2) -} Estimated, net of cost of debt service reserve sureties.

^{(3) -} Includes projected costs of debt service reserve surety, underwriters discount, bond insurance and other costs of issuance.

^{(4) -} Debt Service Reserve Fund is funded by surety bonds held by the Bond Trustee in accordance with Section 7.6(d) of the Bond Indenture.

#### **Historical and Projected Operating Results**

The historical operating results for the City for Fiscal Year 2000 through Fiscal Year 2004 are shown in Table 19. Projected operating results for the City for Fiscal Year 2005 through Fiscal Year 2009 are shown in Table 20. Future revenues have been projected based on increases in water rates as adopted by the City Council and/or anticipated by wholesale contracts. Future expenses have been projected based on increases associated with inflation, customer growth, and increased personnel costs. Interest earnings are calculated based on funds held by the City and the reinvestment rate.

Table 19 City of Norfolk, Virginia Water System Historical Operating Results										
		_		Historical (F	isc	al Year End	ing	June 30th)		
Description		2000		2001		2002		2003		2004
Revenues										
Net Charges for Water Service (1)	\$	59,729,090	\$	59,125,866	\$	59,138,470	\$	63,785,185	\$	60,964,284
Other Revenue		2,150,392		2,932,113		3,513,749		2,779,992		4,374,025
Interest Income	_	2,576,840		2,401,321		849,446		511,015		348,504
Total Revenue	\$	64,456,322	\$	64,459,300	\$	63,501,665	\$	67,076,192	\$	65,686,813
Operation and Maintenance Expense										
Personal Services	\$	8,700,588	\$	8,858,422	\$	9,964,025	\$	11,101,788	\$	11,321,992
Plant Operations		5,580,079		4,779,821		4,898,976		5,275,780		5,040,432
Chemicals		1,583,713		1,503,497		1,730,432		1,592,238		1,644,474
Administrative Expense Other (2)		1,318,521 8,478,540		1,277,371 8,592,814		1,330,273 6,379,371		2,419,073 7,240,289		2,828,613 11,732,375
Outer (2)		0,470,540		0,372,014		0,377,371		7,240,207		11,732,373
<b>Total Operation and Maintenance Expense</b>	\$	25,661,441	\$	25,011,925	\$	24,303,077	\$	27,629,168	\$	32,567,886
Net Revenue Available for Debt Service	\$	38,794,881	\$	39,447,375	\$	39,198,588	\$	39,447,024	\$	33,118,927
Revenue Bond Debt Service	\$	21,705,479	\$	20,330,623	\$	20,143,149	\$	21,541,156	\$	20,291,043
WRBANs Interest		-		-		-		-		69,346
Total Debt Service	\$	21,705,479	\$	20,330,623	\$	20,143,149	\$	21,541,156	\$	20,360,389
Revenue Bond Debt Service Coverage Ratio	_	1.79		1.94		1.95		1.83		1.63
Net Revenue Available for GO Debt Service	\$	17,089,402	\$	19,116,752	\$	19,055,439	\$	17,905,868	\$	12,758,538
General Obligation Debt Service	\$	10,715,480	\$	10,225,740	\$	9,794,113	\$	9,331,640	\$	8,399,588
GO Debt Service Coverage Ratio		1.59		1.87		1.95		1.92		1.52
Combined Debt Service Coverage Ratio	_	1.20		1.29		1.31		1.28		1.15
Net Available for Other Purposes	\$	6,373,922	\$	8,891,012	\$	9,261,326	\$	8,574,228	\$	4,358,950

^{(1) -} Based on accrued sales and net of refunds, etc, therefore different from Table 16.

^{(2) -} Includes supplies, legal and accounting fees, data processing, rent, contractual services and other misc. expenses. Expenses were high in 2004 due to the cost of hurricane clean-up.



		ity of Norfo Water S ected Ope	Sys	tem	s			
	,						20:1	
Description	_	2005 (1)		2006	iscal Year Endi	ng J	2008	2009
Revenues								
Water Rates - Present Rates (2) Water Rates - Increases (2) Transfers from/(To) Rate Stabilization Virginia Beach True-up Other Revenue (3) Interest Income (4)	\$	62,922,022 3,617,546 4,723,783 (4,693,687) 2,800,000 298,547	\$	62,925,658 7,294,667 - - 2,828,000 217,234	\$ 65,458,746 9,145,229 - - 2,856,280 496,967	\$	65,462,386 11,021,732 - - 2,884,843 584,726	\$ 65,466,029 12,913,618 - 2,913,691 668,548
<b>Total Revenue</b>	\$	69,668,211	\$	73,265,559	\$ 77,957,222	\$	79,953,687	\$ 81,961,886
Operating Expenses								
Labor (5) FICA (5) Retirement (6) Health Care (7) Materials and Services (5) Chemicals (8) Electricity (8) Contract Services (5) Equipment (5)	\$	11,105,766 798,285 1,350,927 850,718 2,789,036 2,067,000 2,749,560 7,030,241 157,587	\$	11,438,939 822,234 1,404,964 935,790 2,872,707 2,129,029 2,832,072 7,241,148 162,315	\$ 11,782,107 846,901 1,461,163 1,029,369 2,958,888 2,434,375 3,238,249 7,458,382 167,184	\$	12,135,570 872,308 1,519,610 1,132,306 3,047,655 2,507,427 3,335,424 7,682,133 172,200	\$ 12,499,637 898,477 1,580,394 1,245,537 3,139,085 2,582,671 3,435,516 7,912,597 177,366
<b>Total Operating Expenses</b>	\$	28,899,120	\$	29,839,198	\$ 31,376,618	\$	32,404,633	\$ 33,471,280
Net Revenue Available for Debt Service	\$	40,769,091	\$	43,426,361	\$ 46,580,604	\$	47,549,054	\$ 48,490,606
Revenue Bond Debt Service								
Prior Bonds 2005 Revenue Bonds WRBAN Interest (9) Future Parity Bonds (10)	\$	20,291,059 - 223,437 -	\$	20,293,374 1,114,587 78,750	\$ 20,293,565 1,396,256 105,000	\$	20,290,032 1,397,169 - 2,707,127	\$ 20,297,225 1,392,644 - 2,707,098
<b>Total Revenue Bond Debt Service</b>	\$	20,514,496	\$	21,486,711	\$ 21,794,821	\$	24,394,328	\$ 24,396,967
Revenue Bond Debt Service Coverage Ratio	_	1.99		2.02	2.14		1.95	1.99
Net Revenue Available for GO Debt Service	\$	20,254,595	\$	21,939,650	\$ 24,785,783	\$	23,154,726	\$ 24,093,639
General Obligation Debt Service	\$	7,355,907	\$	6,983,671	\$ 5,850,307	\$	5,249,220	\$ 5,025,361
GO Debt Service Coverage Ratio		2.75		3.14	4.24		4.41	4.79
Combined Debt Service Coverage Ratio	_	1.46		1.53	1.68		1.60	1.65
Net Available for Other Purposes	\$	12,898,688	\$	14,955,979	\$ 18,935,476	\$	17,905,506	\$ 19,068,278

Table 20

^{(1) -} Budget.

^{(2) -} From Table 17.

^{(3) - 2005} Budget increased by the rate of inflation annually.

^{(4) -} Based on the average fund balances and the reinvestment rate.

^{(5) - 2005} Budget increased at a rate of 3.0% annually.

^{(6) - 2005} Budget increased at a rate of 4.0% annually.

^{(7) - 2005} Budget increased at a rate of 10.0% annually.

^{(8) - 2005} Budget increased at the rate of inflation and water sales annually.

^{(9) -} Bond Anticipation Note 2004 and \$4.5 million of Water Revenue Bond Anticipation Notes on January 1, 2006.

^{(10) - \$39} million in 2007 and \$45 million in 2009. Debt service estimates provided by PFM.

The beginning balances, income and expenditure for the General Fund are shown in Table 21. Expenditures include changes in cash working capital for the Operating Fund Reserve Requirement, capital expenditures that are paid with cash, payments in lieu of taxes and the return on investment paid to the City.

Table 21 City of Norfolk, Virginia Water System General Fund											
	Projected (Fiscal Year Ending June 30th)										
Description	2005 (1)		2006		2007			2008		2009	
General Fund											
Beginning Balance	\$	13,456,611	\$	13,002,041	\$	14,079,696	\$	18,831,065	S	22,420,874	
Net Available for Other Purposes (2)	Ψ	12,898,688	Ψ	14,955,979	Ψ	18,935,476	Ψ	17,905,506	Ψ	19,068,278	
		, ,		7 7		- 7 7		. , ,			
Total Sources	\$	26,355,299	\$	27,958,020	\$	33,015,172	\$	36,736,571	\$	41,489,152	
Uses of Funds											
Return on Investment	\$	8,500,000	\$	8,500,000	\$	8,500,000	\$	8,500,000	\$	8,500,000	
Payment in-Lieu of Taxes (3)		2,941,024		3,088,075		3,242,479		3,404,603		3,574,833	
Cash Financed Capital Improvements (4)		1,912,200		2,125,237		2,185,780		2,232,188		2,379,988	
Changes in Cash Working Capital (5)		34		165,012		255,848		178,906		186,831	
Total Uses	\$	13,353,258	\$	13,878,324	\$	14,184,107	\$	14,315,697	\$	14,641,652	
<b>Ending General Fund Balance</b>	\$	13,002,041	\$	14,079,696	\$	18,831,065	\$	22,420,874	\$	26,847,500	

^{(1) -} Budget.

^{(2) -} From Table 20.

^{(3) - 2005} budget increased at 5% annually.

^{(4) -} Includes equipment, autos and cash financed capital.

^{(5) -} Increase in Operating Fund Reserve Requirement based on 1/6 of annual operating expenses.

#### **Additional Bonds Test**

Pursuant to the Master Bond Indenture Section 5.3 (h), the City must meet certain tests prior to the issuance of Additional Bonds on parity with the Outstanding Bonds. Section 5.3 (h) states:

- "(h) If the Bonds (other than the initial Series of Bonds issued under this Master Indenture) are issued to pay the cost of acquiring, renovating, equipping or constructing improvements, extensions, additions or replacements to the System:
- (1) Written certificates from (i) the Director of Utilities setting forth the Director's estimate of the cost of the acquisition, renovation, equipping or construction (including all financing, reserves and related costs) and the date on which such acquisition, renovation, equipping or construction is expected to be completed and (ii) the Director of Finance setting forth the Director's opinion that the proceeds of the Bonds, together with any other money available or anticipated to be available for such purpose, will be sufficient to pay the cost of the acquisition, renovation, equipping or construction; and
- (2) A written certificate from the Director of Finance or the Consulting Engineer that the amount of the Net Revenues as received during any twelve consecutive months of the twenty-four months immediately preceding the issuance of the Bonds or Parity Indebtedness (the "Test Period"), as may be adjusted as permitted in subsection (3) of this Section, will satisfy the revenue covenant contained in Section 9.4 for the Test Period taking into account the maximum amount of principal and interest payments due on (i) the Bonds and Parity Indebtedness then Outstanding and (ii) the Bonds or Parity Indebtedness proposed to be issued.
- (3) For the purpose of subsection (2) of this Section, Net Revenues will be computed as follows:
- (i) If the City, before the issuance of the proposed Bonds or Parity Indebtedness, has increased the rates, fees or other charges for the services or use of the System, the Net Revenues for the Test Period will be adjusted to include the Net Revenues which would have been derived from the System during the Test Period if such increased rates, fees or other charges had been in effect during the Test Period; . . . . "

The Revenue covenant set forth in Section 9.4 of the Bond Indenture states:

"The City will establish, fix, charge and collect rates, fees and other charges for the use of and for the services furnished by the Water System, and will, from time to time and as often as appears necessary, revise such rates, fees and other charges, so that in each Fiscal Year Net Revenues are not less than the greater of (i) the sum of 1.1 times Senior Debt Service and 1.0 times Subordinated Debt Service for the Fiscal Year and (ii) 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund and the Repair and Replacement Reserve Fund as set forth in Section 7.2(a)."

During the Test Period the sum of 1.1 times Senior Debt Service and 1.0 times Subordinated Debt Service exceeds 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund and the Repair and Replacement Reserve Fund.

As shown in Table 22, the City is in compliance with the test required by Section 5.3 (h) and may issue the 2005 Bonds on parity with the Outstanding Bonds.

## Table 22 City of Norfolk, Virginia Water System Additional Bonds Test

(1)	12 months Net Revenue Ending June 30th, 2004	\$ 33,118,927
	Revenue Adjustments for:	
(2)	2005 Rate Increase - 5.3(h)(3)(i) Utility System Acquisitions - 5.3(h)(3)(ii) New Water Service Contracts - 5.3(h)(3)(iii) System Additions, Extensions and Improvements - 5.3(h)(3)(iv)	\$ 3,617,546 - - -
	Total Adjustments	\$ 3,617,546
	Adjusted Net Revenue	\$ 36,736,473
(3)	Projected Maximum Senior Debt Service Projected Maximum Subordinate Debt Service	\$ 21,693,146
	Total Projected Maximum Debt Service	\$ 21,693,146
	Projected Debt Service Coverage	1.69
	Revenue After Maximum Debt Service	\$ 15,043,327

^{(1) - 2004} Net Revenue Available for Debt Service from Table 19.

^{(2) - 2005} Rate Increase from Table 17.

^{(3) -} Maximum Debt Service occurs in 2023.

#### **Section 6**

#### **Principal Considerations and Assumptions**

In the preparation of this report and the opinions that follow, we have made certain assumptions with regard to conditions that may occur in the future. In addition, we use and rely upon certain information and assumptions provided to us by sources we believe to be reliable. We believe the use of such information and assumptions is reasonable for the purpose of this report. However, some assumptions will invariably not materialize as stated herein or will vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others. The principal considerations and assumptions made by us and the principal information and assumptions provided to us by others include the following:

- Economic development in the City's service area will continue in the future.
- The Navy's operations in the City's service area will continue at historical levels.
- Retail water sales are projected to increase at zero percent (0%) annually.
- Wholesale water sales are projected to increase at zero percent (0%) annually.
- The City provided Water System Capital Improvement costs.
- The City provided other revenue for Fiscal Year 2005.
- Operating results for Fiscal Year 2005 were based on the budget prepared by City staff and adopted by the Council.
- The reinvestment rate for funds held by the City was assumed at one percent (1%) for Fiscal Year 2005 and Fiscal Year 2006 and two percent (2%) thereafter.
- The inflation rate was assumed at three percent (3%).
- Projections of operating expenses were assumed to increase from Fiscal Year 2005 budget levels at the rate of inflation.
- Health care costs were assumed to increase at a rate of ten percent (10%) annually from the Fiscal Year 2005 budget levels.
- Labor costs were assumed to increase at a rate of three percent (3%) annually from Fiscal Year 2005 budget levels.
- Retirement benefit costs were assumed to increase at a rate of four percent (4%) annually from Fiscal Year 2005 budget levels.
- Payments in lieu of taxes were assumed to increase at a rate of five percent (5%) annually from Fiscal Year 2005 budget levels.
- Return on investment paid to the City was assumed to remain at the Fiscal Year 2005 budget level for the projection period Fiscal Year 2005 through Fiscal Year 2009.

- Future Additional Bonds interest rates and terms were estimated and provided by Public Financial Management, Inc. financial advisor to the City.
- Future Water Revenue Bond Anticipation Notes were assumed at an interest rate of three and one-half percent (3.5%).
- The City provided historical operating results.

#### **Section 7**

#### **Opinions**

Based on our analyses and studies and the considerations and assumptions set forth in this report, we are of the opinion that:

- The City is currently in compliance with water quality regulations under the Safe Drinking Water Act.
- The City is currently in compliance with the requirements of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the "Bioterrorism Act").
- The funds available from the 2005 Bonds, additional borrowings, together with other money available to the City, including the release of amounts on deposit in the Debt Service Reserve Fund as a result of substituting such amounts with surety bonds will be sufficient to complete the design and/or construction of the Water System Capital Improvements.
- The City's revenues from water service, including rate increases approved by Ordinance 41,047, § 14 and anticipated changes in wholesale rates per the contracts will be sufficient during the period Fiscal Year 2005 through Fiscal Year 2009 to pay the costs of operation and maintenance expenses, pay debt service, meet coverage requirements, pay a portion of the Water System Capital Improvements and maintain required reserve balances.
- The Water System is currently operated and maintained in a manner consistent with sound engineering practices to assure continuous operation of the Water System and compliance with permits and other regulations. The City's current planning and construction practices will assure adequate facilities for maintenance of the Water System, compliance with future regulatory requirements and growth of the Water System.
- The amount of Net Revenues received during the twelve month period ended June 30, 2004, as adjusted as permitted by Section 5.3(h)(3) of the Bond Indenture satisfies the revenue covenant contained in Section 9.4 of the Bond Indenture for the twelve month period ending June 30, 2004 taking into account the maximum amount of principal and interest payments due on (i) Bonds and Parity Indebtedness then Outstanding and (ii) the 2005 Bonds.



WATER UTILITY FUND FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2004 and 2003





#### **Independent Auditors' Report**

The Honorable Members of the City Council City of Norfolk, Virginia

We have audited the accompanying statement of net assets of the Water Utility Fund of the City of Norfolk, Virginia as of June 30, 2004 and 2003, and the related statements of revenues, expenses and changes in fund net assets and cash flows for the years then ended. These financial statements are the responsibility of the management of the City of Norfolk. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America; and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discuss in Note 1 to the financial statements, the accompanying financial statements present only the Water Utility Fund and are not intended to, and do not, present fairly the financial position of the City of Norfolk, Virginia and the results of its operations and its cash flows, where applicable, for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Water Utility Fund of the City of Norfolk, Virginia as of June 30, 2004 and 2003, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 1, the Water Utility Fund is managed by the City of Norfolk, Virginia for which, in accordance with *Government Auditing Standards*, we have also issued our report dated September 24, 2004 on our consideration of the City's, including the Water Utility Fund, internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

We did not audit the supplemental information on page 16 of this report and, accordingly, we express no opinion on it.

Chung, Dekant ! Holland, LLP

Virginia Beach, Virginia September 24, 2004

#### CITY OF NORFOLK, VIRGINIA

#### **WATER UTILITY FUND**

#### Statements of Net Assets June 30, 2004 and 2003

	iii			
		2004		2003
ASSETS				
Current assets:				
Cash and cash equivalents	\$	13,546,611	\$	23,932,077
Investments		918,718		9,027,659
Receivables:				
Accounts (net)		6,324,460		8,458,081
Unbilled accounts		1,004,231		1,026,637
Accrued investment income		29,089		114,239
Other receivables		3,371,646		2,251,894
Internal balances		1,991,860		1,853,580
Inventories		1,657,277		1,420,642
Other assets		240,341		339,247
Restricted cash held in escrow		-		74,975
Restricted cash held with fiscal agent		6,753,922		6,658,952
Total current assets		35,838,155		55,157,983
Restricted investments		25,588,404		21,009,451
Other assets		99,346		1,028,327
Capital assets, net		429,714,436		428,800,627
Total noncurrent assets		455,402,186		450,838,405
Total assets	\$	491,240,341	\$	505,996,388
	<u> </u>	431,240,041	Ψ	303,330,300
LIABILITIES				
Current liabilities:				
Vouchers payable	\$	754,769	\$	1,242,060
Contract retainage	,	46,196	•	121,257
Accrued interest		639,400		582,400
Accrued payroll		235,300		222,404
Internal balances		212,050		153,381
Due to agency fund		•		8,324
Contribution to Employees Retirement System		1,350,927		954,769
Current portion of bonds payable		28,217,265		11,441,252
Liabilities payable from restricted assets		2,436,825		2,412,200
Compensated absences		631,400		552,900
Other liabilities		4,752,577		5,362,570
Total current liabilities		39,276,709		23,053,517
Noncurrent liabilities:				
General obligations payable		26,936,553		31,725,062
Revenue bonds payable		256,327,118		279,219,342
Compensated absences		147,200		153,300
Total noncurrent liabilities		283,410,871		311,097,704
Total liabilities		322,687,580		334,151,221
NET ASSETS		, -,	******	,,
Invested in capital assets, net of related debt		118,233,502		106,489,947
Restricted		29,905,501		25,256,203
Unrestricted		20,413,758		40,099,017
Total net assets	\$	168,552,761	\$	171,845,167
	<u> </u>	,	<u> </u>	

## CITY OF NORFOLK, VIRGINIA WATER UTILITY FUND

#### Statements of Revenues, Expenses, and Changes in Fund Net Assets Years Ended June 30, 2004 and 2003

	 2004	2003
Operating revenues:		
Charges for services	\$ 60,964,284	\$ 63,785,185
Miscellaneous	4,374,025	2,779,992
Total operating revenues	65,338,309	66,565,177
Operating expenses:		 
Personal services	11,321,992	11,101,788
Plant operations	5,040,432	5,275,780
Chemicals	1,644,474	1,592,238
Provision of bad debts	414,468	252,813
Depreciation	9,567,306	9,321,367
Retirement contribution	1,350,927	954,769
Administrative expenses	1,477,686	1,464,304
Other	15,509,885	10,230,396
Total operating expenses	46,327,170	40,193,455
Operating income (loss)	19,011,139	26,371,722
Nonoperating revenue (expenses):		
Interest income, net of interest capitalized	348,504	511,015
Interest expense and fiscal charges	(13,741,959)	(14,185,142
Gain (loss) on sale or disposal of fixed assets	23,290	121,466
Unrealized gain/(loss) on investments	 (572,240)	 (3,350
Total nonoperating revenue (expenses)	(13,942,405)	(13,556,011
Net income (loss) before contributions		
and transfers	5,068,734	12,815,711
Capital contributions	138,861	253,560
Transfers out	 (8,500,000)	 (8,455,000
Change in net assets	(3,292,405)	 4,614,271
Total net assets - beginning	171,845,166	167,230,896
Total net assets - ending	\$ 168,552,761	\$ 171,845,167

## CITY OF NORFOLK, VIRGINIA

## WATER UTILITY FUND

## Statements of Cash Flows Years Ended June 30, 2004 and 2003

	W.L.	
	2004	2003
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from customers	\$ 65,960,115	\$ 67,669,417
Payments to suppliers	(25,747,327)	(19,951,541)
Payments to employees	(11,309,096)	(11,076,684)
Internal activitypayments (to) from other funds  Amortization of bond discount	(87,935)	(553,989)
Other receipts (payments)	726,339	2,247,313
Net cash provided (used) by operating activities	160,113	
receasi provided (used) by operating activities	29,702,209	38,334,516
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES	(0.500.000)	
Operating subsidies and transfers to other funds	(8,500,000)	(8,455,000)
CASH FLOWS FROM CAPITAL AND		
RELATED FINANCING ACTIVITIES	40 555 400	
Proceeds from sale of debt Capital contributions	10,557,160	17,000,000
·	/0 F0F 070)	-
Purchases of capital assets Refunding of debt principal	(8,565,073)	(9,217,979)
Principal paid on capital debt	(12,193,689)	397,171
Interest paid and bond service charges	(11,072,521)	(12,676,411)
Net cash provided (used) by capital and	(13,684,959)	(14,212,642)
related financing activities	(34,959,082)	(18,709,861)
CACH EL ONIC EDOM INDECTINO ACTOUTIES	<del></del>	
CASH FLOWS FROM INVESTING ACTIVITIES Proceeds from sales and maturities of investments	9 500 000	/7 000 C ***
Interest and dividends	3,529,988	(7,006,342)
	(138,586)	509,818
Net cash provided by investing activities	3,391,402	(6,496,524)
Net increase (decrease) in cash and cash equivalents	(10,365,471)	4,673,131
Cash and cash equivalents - beginning of the year	30,666,004	25,992,873
Cash and cash equivalents - end of the year	\$ 20,300,533	\$ 30,666,004
Reconciliation of Operating Income (Loss) to Net Cash		-
Provided (Used) by Operating Activities		
Operating income	\$ 19,011,139	\$ 26,371,722
Adjustments to reconcile operating income to net cash		
provided (used) by operating activities:		
Cash flows reported in other categories:		
Depreciation expense	9,5 <del>6</del> 7,306	9,321,367
Provision for bad debt	726,339	(439,839)
Amortization	414,468	252,813
Gain on disposal of assets	23,290	121,466
Change in assets and liabilities:		
Receivables, net	2,019,816	4,689,513
Internal balances	(87,935)	(508,989)
Other receivables	(1,119,752)	(1,499,625)
Inventories	(236,635)	(167,600)
Accounts/vouchers payables	(487,288)	168,584
Accrued payroll Other (lebilities)	12,896	25,104
Other liabilities  Net cash provided by operating activities	(141,435)	
net cash provided by operating activities	\$ 29,702,209	\$ 38,334,516
Reconciliation of cash and cash equivalents	,, <del>,,,,,</del>	
to the statement of net assets:		
Cash and cash equivalents	\$ 13,546,611	\$ 30,666,004
Restricted cash held in escrow	•	(74,975)
Restricted cash with fiscal agent	6,753,922	(6,658,952)
Total cash and cash equivalents per statement of net assets	\$ 20,300,533	\$ 23,932,077
Noncash investing, capital, and financing activities:		*
Unrealized gain / (loss) on investments	\$ (572,240)	\$ (3,350)
Gain (loss) on sale or disposal of capital assets	23,290	121,466
Acquisition of fixed assets through change in		1,-100
in contract retainage	29,089	114,338
Capitalized interest, less interest earned on	,	,550
certain long-term construction contracts	2,310,462	2,134,286

**Years Ended June 30, 2004 and 2003** 

### Note 1. Summary of Significant Accounting Policies

The Water Utility Fund (the "Fund") was established at the direction of Norfolk City Council as an enterprise fund on July 1, 1979. The Fund accounts for the provision of water services to City of Norfolk (the "City") residents, municipal customers and others outside the City. Activities necessary to provide water services, including operations, maintenance, financing and related debt service, and billing and collection, are accounted for in the Fund. Although separate financial statements have been presented for the Fund, it is also included in the City of Norfolk's Comprehensive Annual Financial Report as an Enterprise Fund.

A summary of the Fund's significant accounting policies is as follows:

Basis of accounting: The Fund uses the accrual basis of accounting. Revenue is recognized in the accounting period in which it is earned and expenses are recognized in the accounting period in which the related liabilities are incurred. The Fund adopted Statement No. 20 of the Governmental Accounting Standards Board, Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that Use Proprietary Fund Accounting. Accordingly, the Fund has elected not to apply Statements and Interpretations issued by the Financial Accounting Standards Board after November 30, 1989.

<u>Cash equivalents and investments</u>: Investments are stated at fair market value. All highly liquid investments with an original maturity of three months or less are considered to be cash equivalents. The Fund had \$13,000,000 invested in the State Treasurer's Local Government Investment Pool (LGIP) at June 30, 2004.

Interfund transactions: The General Fund of the City provides administrative services to the Fund, which totaled \$1,477,686 and \$1,464,304 for the years ended June 30, 2004 and 2003, respectively. Charges for these services are treated as expenses by the Fund and as revenue by the General Fund. In addition the Fund recorded, as other expenses, payments to the General Fund in lieu of taxes of \$2,883,357 and \$2,900,107 for the years ended June 30, 2004 and 2003 respectively.

<u>Inventories</u>: Inventories are stated at the lower of cost (using the moving average method) or market.

<u>Capital assets</u>: Capital assets are recorded at cost, less accumulated depreciation. Assets acquired prior to July 1977, for which historical cost records were not available, were appraised and valued at estimated historical cost by means of accepted price indexing methodology.

## Years Ended June 30, 2004 and 2003

## Note 1. Summary of Significant Accounting Policies (Continued)

<u>Depreciation</u>: Depreciation is computed using the straight-line method over the following estimated useful lives:

	<u>Years</u>
Buildings and improvements	40 - 75
Land Improvements	35 - 99
Transmission and distribution mains	50 - 99
Service meters and meter installation	35 - 50
Pumping and other water equipment	10 - 30
Furniture, fixtures and equipment	5 - 25

When an asset is retired or otherwise disposed of, the related cost and accumulated depreciation are eliminated from the accounts and any resulting gain or loss is reflected as non-operating revenue or expense. Interest costs incurred on funds borrowed for construction projects are capitalized, net of interest earned on the temporary investment of the unexpended portion of those funds.

Bond discount/premium: Discount and premium on bonds is amortized, using the effective interest method, over the life of the debt and is included in interest expense.

<u>Deferred gain (loss) on advance refunding</u>: Gain or (loss) on advance refunding is amortized, using the effective method, over the shorter of the life of the refunded bonds or the life of the new bonds.

Operating and nonoperating revenues: The Fund reports as operating revenues all charges for services generated through service fees and certain other miscellaneous revenues. Other revenues, including interest revenue and grants, are reported as nonoperating. When both restricted and unrestricted resources are available for use, the policy is to use restricted resources first, and then unrestricted resources as they are needed.

<u>Estimates</u>: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Years Ended June 30, 2004 and 2003

### Note 2. Investments

The following is a summary of the Water Fund's investments as of June 30, 2004 and 2003:

2004			2003				
			Fair				Fair
	Cost		Value		Cost		Value
\$	5,669,972	\$	5,669,972	\$	9,027,660	\$	9,027,660
	8,100,000		8,100,000		7,700,000		7,700,000
	12,454,784		12,737,150		12,518,903		13,309,401
\$	26,224,756	\$	26,507,122	\$	29,246,563	\$	30,037,061
	\$	Cost \$ 5,669,972 8,100,000 12,454,784	Cost \$ 5,669,972 \$ 8,100,000 12,454,784	Cost         Value           \$ 5,669,972         \$ 5,669,972           8,100,000         8,100,000           12,454,784         12,737,150	Fair           Cost         Value           \$ 5,669,972         \$ 5,669,972         \$           8,100,000         8,100,000         12,454,784         12,737,150	Fair           Cost         Value         Cost           \$ 5,669,972         \$ 5,669,972         \$ 9,027,660           8,100,000         8,100,000         7,700,000           12,454,784         12,737,150         12,518,903	Fair           Cost         Value         Cost           \$ 5,669,972         \$ 5,669,972         \$ 9,027,660         \$           8,100,000         8,100,000         7,700,000           12,454,784         12,737,150         12,518,903

The following is a reconciliation of investments held at year-end to the Statement of Net Assets:

	 2004	2003
Current assets	\$ 918,718	\$ 9,027,610
Restricted	 25,588,404	21,009,451
	\$ 26,507,122	\$ 30,037,061

The City's Water Utility Fund has combined amounts restricted for capital projects and amounts for which the nature of the transaction generated a related liability with amounts available for general operating use in the statements for the Water Utility Fund. These amounts are not available to meet obligations arising from the operating activities of the Fund.

A summary of the liabilities payable from restricted assets at June 30, 2004 and 2003, follows:

	2004	2003
Accrued Interest	\$ 2,436,825	\$ 2,412,200

## Years Ended June 30, 2004 and 2003

### Note 3. Accounts Receivable

Accounts receivable at June 30, 2004 and 2003 are comprised of the following:

	2004	2003
City of Virginia Beach	\$ 1,972,803 \$	3,819,693
United States Navy	1,097,034	1,069,187
Residential	1,840,766	1,963,565
Refuse disposal fees	1,022,568	1,157,932
Commercial	648,858	744,353
Utility taxes	484,959	551,573
Industrial	198,693	271,288
Penalties	84,389	248,847
Other	738,784	808,099
	8,088,854	10,634,537
Less: allowance for uncollectible accounts	(1,764,394)	(2,176,456)
	\$ 6,324,460 \$	8,458,081

Utility taxes and refuse disposal fees receivable are remitted to the City's General Fund when collected.

### Note 4. Unbilled Accounts Receivable

At June 30, 2004 and 2003, the Fund recognized \$1,004,231 and \$1,026,637 respectively, as unbilled accounts receivable related to unread meters. The associated revenue is included in net charges for services.

### Note 5. Prepaid Rent

As of June 30, 2004, the fund has prepaid rent of \$339,687 to the City for office space that is being amortized over approximately ten years. The amortization of the prepayment commenced on December 1, 1995.

**Years Ended June 30, 2004 and 2003** 

## Note 6. Capital Assets

Capital assets at June 30, 2004 and 2003 are comprised of the following:

	2004	2003
I and land sister and land improvements	¢ 10.616.007	# 10 C1C 007
Land, land rights and land improvements	\$ 18,616,987	\$ 18,616,987
Buildings and building improvements	151,761,203	145,373,646
Transmission and distribution mains	158,409,362	158,100,754
Service meters and meter installation	20,701,951	20,411,091
Pumping and other water/wastewater equipment	79,916,707	78,480,036
Furniture, fixtures and equipment	12,586,648	12,456,611
Construction-in-progress	67,627,337	68,230,569
Capitalized interest	16,727,472	14,417,010
	526,347,667	516,086,704
Less accumulated depreciation:		
Buildings and building improvements	(24,003,681)	(21,441,386)
Transmission and distribution mains	(35,896,559)	(33,409,741)
Service meters and meter installation	(6,918,927)	(6,458,382)
Pumping and other water/wastewater equipment	(23,898,905)	(20,643,802)
Furniture, fixtures and equipment	(5,915,159)	(5,332,766)
	\$ 429,714,436	\$428,800,627

The Fund capitalized \$3,684,743 and \$3,801,820 of interest expense and \$1,374,281 and \$1,667,534 of interest income for the fiscal years ended June 30, 2004 and 2003 respectively. The total interest cost was \$17,426,702 and \$17,986,962 for the fiscal year ended June 30, 2004 and 2003 respectively.

### Note 7. Long -Term Obligations

General obligation bonds: A summary of general obligation bond transactions for the fiscal year ended June 30, 2004 and 2003 follows:

	 2004	2003
General obligation bonds outstanding		
at July 1	\$ 37,443,514 \$	45,012,129
Bonds retired	(5,486,251)	(7,193,139)
Bonds refunded	(12,193,689)	(3,281,136)
Bonds issued	 10,557,160	2,905,660
Bonds outstanding at June 30,	 30,320,734	37,443,514
Unamortized discount/premium	 1,583,084	(232,200)
General obligation bonds outstanding		
June 30, adjusted for		
unamortized discount/premium	31,903,818	37,211,314
Less current portion	(4,967,265)	(5,486,252)
	\$ 26,936,553 \$	31,725,062

## Years Ended June 30, 2004 and 2003

Water utility general obligation bonds outstanding are comprised of the following individual issues:

\$28,431,728 public improvement serial bonds included as	<u>2004</u>	<u>2003</u>
part of the \$101,295,000 bonds issued March 2, 1993 due in annual installments varying from \$750,000 to \$2,509,695 through February 1, 2013, with interest payable semiannually at rates varying from 4	\$ -	\$ 819,582
\$5,347,960 public improvement serial bonds included as part of the \$29,065,000 bonds issued July 1, 1993, due in annual installments varying from \$470,120 to \$529,920, through June 1, 2006, with interest payable semiannually at rates varying from 4.00 to	945,760	1,432,440
\$27,461,667 public improvement serial bonds included as part of the \$182,685,000 bonds issued March 17, 1994, due in annual installments varying from \$867,707 to \$2,718,730 through June 1, 2011, with interest payable semiannually at rates varying from 4.3	-	14,870,373
\$10,692,696 public improvement serial bonds included as part of the \$93,520,000 bonds issued June 15, 1998, due in annual installments varying from \$6,521 to \$1,402,071 beginning June 01, 2006 through June 1, 2012, with interest rates varying from 4.25 t	10,692,696	5 10,692,696
\$8,352,561 public improvement refunding bonds included as part of the \$47,200,000 refunding bonds issued February 13, 2002 due in annual installments varying from \$ \$1,629,798 to \$730,014 beginning January 01, 2003 through June 30, 2013 with interest rate	5,219,458	6,722,763
\$2,883,964 public improvement serial bonds included as part of the \$39,890,000 refunding bonds issued November 14, 2002, due in annual installments varying from \$739,589 to \$32,786 beginning July 1, 2004 through July 1, 2012 with interest rates varying fr	2,905,660	2,905,660

Years Ended June 30, 2004 and 2003

Net water utility development bonds outstanding	\$ 31,903,818	\$ 37,211,314
· · · · · · · · · · · · · · · · · · ·		
ess unamortized bond discount/premium	1,583,084	232,200
Vater utility development bonds outstanding	30,320,734	37,443,514
5.00 percent	10,552,847	
June 1, 2017 with interest rates varying from 2.00 to		
varying from \$5,000,000 to \$14,510,000 through		
ssued on March 3, 2004, due in annual installments		
ncluded as part of the \$96,395,000 refunding bonds		
310,552,847 public improvement serial bonds		
with interest rates varying from 3.00 to 4.00 percent.	\$ 4,313	\$ -
350,000 to \$3,620,000 through December 1, 2009		
December 3, 2003, due in annual installments of		
part of the \$12,265,000 refunding bonds issued		
54,313 public improvement serial bonds included as		
Water Utility General Obligations Bonds (con't)	<u>2004</u>	<u>2003</u>

A summary of the requirements to amortize general obligation bonds outstanding at June 30, 2004 is as follows:

Year Ending		
June 30,	<b>Principal</b>	<u>Interest</u>
2005	4,967,265	1,977,150
2006	4,065,610	1,706,628
2007	3,775,360	1,396,121
2008	3,963,830	1,000,697
2009	3,809,902	856,110
2010-2014	9,176,852	1,180,184
2015-2019	561,915	14,048
•	\$ 30,320,734	\$ 8,130,938
2009 2010-2014	\$ 3,809,902 9,176,852 561,915	856,110 1,180,184 14,048

General obligation bonds are payable first from the revenue of the specific funds in which they are recorded; however, the full faith and credit of the City are pledged to the payment of the principal and interest on general obligation bonds.

On June 15, 1998, the City sold general obligation bonds which were used to defease \$10,216,644 of 1992 general obligation bonds from the Fund. The proceeds of the new bonds have been placed in an irrevocable trust. These bonds will be called for optional redemption before maturity on February 1, 2001; accordingly, the trust account assets and the liability for the defeased bonds are not included in the financial statements.

## Years Ended June 30, 2004 and 2003

## Note 7. Long -Term Obligations (Continued)

Revenue bonds: A summary of revenue bond transactions for the fiscal years ended June 30, 2004 and 2003 follows:

		2004	2003
Revenue bonds outstanding at July 1	-\$	290,360,000 \$	279,060,000
Bonds retired		(5,955,000)	(5,700,000)
Bonds anticipation note		=	17,000,000
Bonds outstanding at June 30		284,405,000	290,360,000
Less unamortized discount		(4,827,882)	(5,185,658)
Revenue bonds outstanding at June 30			
adjusted for unamortized discount/premium		279,577,118	285,174,342
Less: current portion		(23,250,000)	(5,955,000)
	\$	256,327,118 \$	279,219,342

Water utility revenue bonds outstanding are comprised of the following individual issues:

\$68,430,000 water revenue serial bonds issued November 1, 1993, due in annual installments varying from \$1,290,000 to		2004		2003	
\$4,410,000 through November 1, 2023, with interest payable semiannually at rates varying from 2.80 to 5.375 percent.	\$	55,635,000	\$	57,175,000	
\$115,680,000 water revenue serial bonds issued August 15, 1995, due in annual installments varying from \$1,820,000 to \$7,910,000 through November 1, 2025 with interest payable semiannually at					
rates varying from 5.00 to 7.00 percent.		100,745,000		102,960,000	
\$84,605,000 water revenue serial bonds issued November 1, 1998, due in annual installments varying from \$1,365,000 to \$5,285,000 through June 30, 2029, with interest payable semiannually at rates varying from 4.00 to 5.125 percent.		77,205,000		78,805,000	
\$35,000,000 water revenue serial bond issued October 15, 2001, due in annual installments of \$580,000 to \$2,150,000 beginning November 1, 2002 through November 1, 2031, with interest payable semiannually at rates varying from 4.00 to 5.00 percent.		33,820,000		34,420,000	
\$17,000,000 water revenue bond anticipation note issued April 1, 2003 and due October 1, 2004, with interest payable at maturity at					
the rate of 1.65 percent.		17,000,000		17,000,000	
		284,405,000		290,360,000	
Less unamortized discount		4,827,882		5,185,658	
Net water utility revenue bonds outstanding	\$	279,577,118	\$	285,174,342	

Years Ended June 30, 2004 and 2003

A summary of the requirements to amortize water revenue bonds outstanding at June 30, 2004 is as follows:

Year Ending June 30,	Principal	Interest	
2005	23,250,000	14,181,309	
2006	6,580,000	13,713,374	
2007	6,915,000	13,378,564	
2008	7,255,000	13,035,031	
2009	7,630,000	12,667,225	
2010-2014	44,565,000	56,898,550	
2015-2019	58,105,000	43,356,494	
2020-2024	76,275,000	25,196,156	
2025-2029	47,690,000	6,719,864	
2030-2033	6,140,000	470,750	
Total	\$ 284,405,000	\$ 199,617,317	

Water revenue bonds are payable solely from the revenue of the Fund. The most restrictive covenant of the water revenue bonds requires that the Fund's net revenue not be less than the greater of (I) the sum of 1.1 times senior debt service and 1.0 times subordinated debt service for the fiscal year or (ii) 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Revenue Fund, the Subordinated Debt Service Fund and the Repair and Replacement Reserve Fund. Pursuant to the terms of the revenue bond indenture, certain resources have been set aside for the repayment of the revenue bonds. These resources are classified as restricted investments and cash held with fiscal agent on the balance sheet because their use is limited by applicable bond covenants.

Water revenue bonds authorized and unissued as of June 30, 2004 were \$69,068,596.

### Note 8. Retirement Obligations

The Fund contributes to the Employees' Retirement System of the City of Norfolk (the "System"), a single-employer noncontributory defined benefit plan, which is accounted for as a separate Pension Trust Fund. Reference should be made to the Comprehensive Annual Financial Report of the City of Norfolk for a further description of the plan. Retirement expense was \$1,350,927 and \$954,769 for the years ended June 30, 2004 and 2003.

Years Ended June 30, 2004 and 2003

### Note 9. Other Liabilities

A current liability of \$4,693,687 has been recorded in the Water Utilities Fund to reflect over-recovery of revenue from a wholesale customer during fiscal year 2002 and 2003 under the water contract. Pursuant to the terms of the water services contract, billings to the customer was based on budgeted Water Utility Fund capital and operating expenditures during the fiscal years. The liability reflects the adjustments to billings based on the difference between budgeted expenditures and actual cost of service for that customer (capital and operating). In accordance with the water services contract, the fiscal year 2002 and 2003 portion of the liability will be reduced in fiscal year 2005 through credits to the customer billings.

## Notes 10. Concentration of Credit Risk and Significant Customers

Accounts receivable includes \$1,972,803 and \$3,819,692 due from the City of Virginia Beach and \$1,097,034 and \$1,069,187 due from the United States Navy for water sales at June 30, 2004 and 2003, respectively. Net charges for services includes \$23,154,022 and \$23,538,977 for water sales to the City of Virginia Beach and \$8,263,722 and \$10,964,261 for the United States Navy for the fiscal year ended June 30, 2004 and 2003, respectively.

The Fund's cash and investments are combined with other City monies for investment purposes. These amounts were covered by federal depository insurance or collateralized in accordance with the Virginia Security for Public Deposits Act. Reference should be made to the Comprehensive Annual Financial Report of the City of Norfolk for further cash and investment disclosures.

### Note 11. Commitments and Contingencies

Commitments for completion of capital projects authorized at June 30, 2004 were approximately \$11,904,231.

### Note 12. Litigation

The Fund and the City are defendants in a number of lawsuits. Although it is not possible to determine the final outcome of these matters, management and the City attorney are of the opinion that the ultimate liability will not be material and will not have a significant effect on the Fund's or the City's financial condition.

# CITY OF NORFOLK, VIRGINIA WATER UTILITY FUND

## ANNUAL BUDGETS (Cash Basis) (Unaudited)

Years Ended June 30, 2004 and 2003

	2004		2003	
Revenues:			<del></del>	
Total water revenues	\$	62,018,321	\$ 63,681,671	
Interest income		968,433	981,300	
Miscellaneous	8,666,246		3,473,529	
	\$	71,653,000	\$ 68,136,500	
Appropriations:				
Personal services	\$	12,303,298	\$ 10,914,267	
Materials, supplies, and repairs		8,599,298	7,699,527	
General operations and fixed charges		8,220,886	4,987,567	
Equipment		914,141	515,148	
Allocated overhead	1,441,762		1,455,788	
Debt service and expenses:				
Revenue bond		20,291,043	21,541,156	
General obligation bond debt		8,399,588	9,331,640	
Payment in Lieu of Taxes (PILOT)		2,903,131	2,900,107	
Transfer to General Fund		8,500,000	8,500,000	
Contingency		79,853	150,000	
Total appropriations	\$	71,653,000	\$ 67,995,200	

Source: Approved Operating Budgets for fiscal years ending June 30, 2004 and 2003.

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DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE



## DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

### **Definitions of Certain Terms**

"Accreted Value" will have the meaning set forth in the Supplemental Indenture authorizing any Capital Appreciation Bonds.

"Act" means the Public Finance Act of 1991, Chapter 26 of Title 15.2, of the Code of Virginia of 1950, as amended.

"Additional Bonds" mean any Bonds other than the 1993 Bonds, 1995 Bonds, 1998 Bonds, the 2001 Bonds, or the 2005 Bonds.

"Annual Budget" means the budget referred to in Section 9.3.

"Authorized City Representative" means any person or persons designated to act on behalf of the City by a certificate signed by its Director of Finance and filed with the Trustee.

"Average Interest Rate" means the average of the actual interest rates which were in effect (weighted according to the length of the period during which each such interest rate was in effect) for the most recent twelve-month period immediately preceding the date of calculation for which such information is available (or shorter period if such information is not available for a twelve-month period), except that with respect to new Variable Rate Indebtedness the interest rate for such Variable Rate Indebtedness for the initial interest rate period will be the initial rate at which such Variable Rate Indebtedness is issued and thereafter will be calculated as set forth above.

"Balloon Indebtedness" means any Indebtedness, including any Bond Anticipation Notes, twenty-five percent or more of the original principal amount of which matures or is subject to mandatory redemption during any consecutive twelve-month period, if the maturing principal amount is not required to be amortized below such percentage by mandatory redemption or prepayment before the twelve-month period.

"Bank" means (i) a bank or trust company that has a combined capital, surplus and undivided profits of not less than \$50,000,000 or (ii) a subsidiary trust company with combined capital, surplus and undivided profits, together with that of its parent bank or bank holding company, as the case may be, of not less than \$50,000,000; provided, however, that any such bank or trust company will have (or have a parent company which has) a long-term debt rating within one of the three highest categories by at least one of the Rating Agencies.

"Bond" or "Bonds" mean any bond or all of the bonds, as the case may be, issued pursuant to the Master Indenture and any Supplemental Indenture, but not including any Parity Indebtedness or Subordinate Debt or any bonds or other evidence of indebtedness of the City issued from time to time under any other indenture, trust agreement, ordinance, resolution or similar instrument.

"Bond Anticipation Notes" mean notes or other obligations issued in anticipation of the issuance of Bonds.

"Bond Counsel" means an attorney or a firm of attorneys (designated by the City) of nationally recognized standing in matters pertaining to the validity of and the tax-exempt nature of interest on bonds issued by states and their political subdivisions, duly admitted to the practice of law before the highest court of any state of the United States of America.

"Bond Debt Service" means for any period of twelve consecutive months the Debt Service Requirement with respect to any Bonds then Outstanding.

"Bond Fund" means the fund established by Section 7.1(d).

"Business Day" means any day other than (i) a Saturday or Sunday, (ii) a day on which commercial banks in the Commonwealth, or the city in which the principal corporate trust office of the Trustee or the Paying Agent is located, are authorized by law to close, (iii) a day on which the New York Stock Exchange is closed, or (iv) such other days as may be specified in a Supplemental Indenture.

"Capital Appreciation Bonds" mean the Bonds in any Series designated as Capital Appreciation Bonds in the Supplemental Indenture authorizing the issuance of the Series.

"Capitalized Interest Account" means the Capitalized Interest Account of the Bond Fund established by Section 7.1(d).

"City" means the City of Norfolk, Virginia, a political subdivision of the Commonwealth.

"City Obligations" means for any Fiscal Year the amount budgeted to be paid to the general fund of the City for PILOT and ROI.

"Code" means the Internal Revenue Code of 1986, as amended, including applicable regulations and revenue rulings, and any successor codification.

"Commonwealth" means the Commonwealth of Virginia.

"Compounding Date" for Bonds of any Series will have the meaning set forth in the Supplemental Indenture authorizing the issuance of such Series.

"Consulting Engineer" means an independent engineering firm or individual engineer licensed to do business in Virginia and experienced with matters related to utilities similar to the System retained by the City as Consulting Engineer.

"Contracted Services" mean services rendered or facilities provided to the City in respect of the System or for the performance for or on behalf of the City of functions similar to those performed by the System, from a specific project, projects or systems, pursuant to a Service Contract, whether a financing lease, a service agreement or another arrangement.

"Cost" or "Cost of the Project" means all costs incurred by the City in connection with the acquisition, expansion, construction, improvement, renovation and equipping of the System or any Project comprising a portion of the System, as permitted by the Act, including, without limitation, the payment of costs of issuance of Bonds and the funding of such funds and accounts as provided in the Master Indenture or any Supplemental Indenture, the cost of all lands, properties, rights, easements, franchises and permits acquired, the cost of all machinery and equipment, amounts paid to purchase capacity or services from other entities which are required to be capitalized or which the City makes an election to capitalize, financing charges, initial credit enhancement charges, interest before and during construction of any Project and for up to one year after completion of construction of any Project, any amounts required to be rebated to the United States of America pursuant to Section 148(f) of the Code, any deposits to any bond interest and principal reserve accounts, the cost of engineering and legal services, plans, specifications, surveys, estimates of costs and of revenues, other expenses necessary or incident to determining the feasibility or practicability of any acquisition, improvement or construction, administrative expenses, working capital, the retirement of notes or other interim financing the proceeds of which were used to pay Costs, and such other expenses as may be necessary or incidental to the improvement of the System and placing it in operation.

"Cost of Contracted Services" means the payments to be made by the City for Contracted Services which may be allocated by the City between: (i) a Debt Service Component and (ii) an Operating Component. No designation or characterization of payments under a Service Contract will affect the City's right to make some other allocation of the payments for the purpose of the Master Indenture.

"Counsel" means such attorney or firm of attorneys selected or approved by the City who are duly admitted to practice law before the highest court of any state of the United States of America, none of whom is a full-time employee, member, director or officer of the City or a full-time employee or officer of the Trustee.

"Credit Facility" means a line of credit, letter of credit, standby bond purchase agreement or similar credit enhancement or liquidity facility established to provide credit or liquidity support for Bonds or Parity Indebtedness.

"Dealer" means a financial institution or government bond dealer which (i) is a member of the Securities Investors Protection Corporation and (ii) has a long-term debt rating in one of the three highest rating categories by at least one of the Rating Agencies or has a dealer or parent holding company that has a long-term debt rating within one of the three highest rating categories by at least one of the Rating Agencies.

"Debt Service Component" means the portion of the Cost of Contracted Services that an Authorized City Representative determines, in a certificate delivered to the Trustee, to be for the purpose of paying a fixed charge or the principal of or interest on the obligations, directly or indirectly associated with rendering the Contracted Services, of the person providing the Contracted Services.

"Debt Service Requirement" means, for any period of twelve consecutive months for which such determination is made, the aggregate of the amounts required to be deposited, as the case may be in the Bond Fund, the Parity Debt Service Fund and the Subordinate Debt Service Fund during this period pursuant to Section 7.2 with respect to any Bonds, Parity Indebtedness or Subordinate Indebtedness; provided, however, that:

- (a) with respect to any Option Obligations, such Option Obligations will be assumed to mature on their stated dates of maturity;
- (b) with respect to Balloon Indebtedness, it will be assumed that the principal of such Balloon Indebtedness, together with interest at the rate applicable to such Balloon Indebtedness, will be amortized in equal annual installments over a period of thirty years from the date the Balloon Indebtedness was incurred;
- (c) with respect to Variable Rate Indebtedness, interest on such Indebtedness will be calculated at the Average Interest Rate;
- (d) with respect to obligations related to any Credit Facility which constitute Parity Indebtedness or Subordinate Debt, to the extent that such Credit Facility has not been used or drawn upon, or any such drawing or use has been reimbursed to the provider the principal and interest relating to such Credit Facility will not be included in the Debt Service Requirement for such Parity Indebtedness or Subordinate Debt; and
- (e) with respect to any Derivative Indebtedness, the interest on such Indebtedness will be calculated at the Hedged Fixed Rate, if any.

"Debt Service Reserve Fund" means the fund established in Section 7.1(f).

"Debt Service Reserve Requirement" means an amount equal to the maximum amount of principal and interest payments due on the Bonds in the current or any future Fiscal Year; provided, however, that the Debt Service Reserve Requirement for any Series of Bonds may be less than the amount specified above if such lesser amount is set forth in the Supplemental Indenture authorizing the issuance of such Series of Bonds and such Supplemental Indenture establishes separate accounts in the Bond Fund and, if necessary in the Debt Service Reserve Fund for such Series of Bonds and provides that only such separate accounts within the Bond Fund and the Debt Service Reserve Fund are pledged to the payment of such Series of Bonds. With respect to any Series of Bonds, the Debt Service Reserve Requirement may be increased by the City to the extent that there is delivered to the Trustee an opinion of Bond Counsel to the effect that the increase will not adversely affect the exclusion of interest on the Bonds from gross income for purposes of federal income taxation. In determining the amount of principal and interest due on Bonds which are Variable Rate Indebtedness, interest will be calculated at a rate equal to the greater of (i) the actual interest rate on the Bonds in effect on the date of their issuance or (ii) the current average yield on municipal revenue bonds maturing in thirty years, according to the weekly index published by The

Bond Buyer for the week immediately preceding the week in which the Bonds are issued. In the event The Bond Buyer is not published as the date of any determination, or if published, does not publish an index of the current yield on municipal revenue bonds maturing in thirty years, an alternative index or other source of current bond yields may be selected by the City with the consent of the Trustee. In determining the amount of principal and interest due on Bonds which are Balloon Indebtedness, the amount of principal and interest on the Balloon Indebtedness due in any year will be calculated by assuming that the original principal amount of the Balloon Indebtedness amortized in equal annual installments over a period of thirty years from the date the Balloon Indebtedness was incurred.

"Defeased Municipal Obligations" mean obligations of state or local government municipal bond issuers, which are rated in the highest rating category by Moody's Investors Service, Inc., and Standard & Poor's Corporation, provision for the payment of the principal of and interest on which has been made by the deposit with a trustee or escrow agent of Government Obligations or Government Certificates, the maturing principal of and interest on which, when due and payable, will provide sufficient money to pay the principal of, redemption premiums, if any, and interest on such obligations of state or local government municipal bond issuers.

"Defeased Municipal Obligation Certificate" means evidence of ownership of a proportionate interest in specified Obligations, which Obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any of its states acceptable to the Trustee in the capacity of custodian.

"Defeasance Obligations" mean (i) noncallable Government Obligations, (ii) Government Certificates, (iii) Defeased Municipal Obligations and (iv) Defeased Municipal Obligation Certificates.

"De Minimis Amount" means (i) in reference to original issue discount (as defined in Section 1273(a)(1) of the Code) or premium on an obligation (A) an amount that does not exceed two percent multiplied by the stated redemption price at maturity plus (B) any original issue premium that is attributable exclusively to reasonable underwriter's compensation; and (ii) in reference to market discount (as defined in Section 1278(a)(2)(A) of the Code) or premium on an obligation, an amount that does not exceed two percent multiplied by the stated redemption price at maturity.

"Derivative Indebtedness" has the meaning given to it in any Supplemental Indenture authorizing the issuance of a Series of Bonds and may also include, but is not limited to, a portion of Indebtedness which bears interest at a variable rate during any future period of time meeting the following requirements:

- (a) the City has entered into a Hedge Agreement in respect of such Indebtedness within sixty days of the date of the issuance of the Indebtedness, and
- (b) the Hedge Agreement provides that during the entire period that such Indebtedness bears interest at a variable rate the City will pay a fixed rate to the provider of the Hedge Agreement and the provider of the Hedge Agreement will pay the variable rate borne by such Indebtedness, or such Indebtedness, taken together with the Hedge Agreement, results in a net fixed rate payable by the City to the provider of the Hedge Agreement for such period of time (the "Hedged Fixed Rate"), assuming the City and the provider of the Hedge Agreement make all payments required to be made by the terms of the Hedge Agreement.

"Director of Finance" means the Director of Finance of the City or, if the City no longer has a person with the title of Director of Finance, the person filling the office with similar duties as the Director of Finance.

"Director of Utilities" means the Director of Utilities of the City or if the City no longer has a person with the title of Director of Utilities, the person filling the office with similar duties as the Director of Utilities.

"Existing Debt Service" means for any Fiscal Year the amount budgeted to be paid to the general fund of the City to pay debt service on general obligation bonds of the City issued to pay costs of the System.

"Event of Default" means any Event of Default specified in Section 10.1.

"Financial Institution" means any Bank, Insurance Company or Dealer.

"Fiscal Year" means the period of twelve months established by the City as its annual accounting period.

"Fixed Rate Investment" means any obligation the yield on which was fixed and determinable on its issue date.

"General Reserve Fund" means the funds established by Section 7.1(j).

"Government Certificates" mean evidences of ownership of a proportionate interest in specified Government Obligations which are held by a bank or trust company organized and existing under the laws of the United States of America or any of its states acceptable to the Trustee in the capacity of custodian.

"Government Obligations" mean bonds, notes and other direct obligations of the United States of America and securities unconditionally guaranteed as to the timely payment by the United States of America.

"Hedge Agreement" means a contract or agreement, payable from Net Revenues on a parity with or subordinate to any Bonds or Parity Indebtedness intended to place Indebtedness on the interest rate, currency, cash flow or other basis desired by the City, including, without limitation, any interest rate swap agreement, currency swap agreement, forward payment conversion agreement or futures contract, any contract providing for payments based on levels of, or changes in, interest rates, currency exchange rates, stock or other indices, any contract to exchange cash flows or a series of payments, or any contract, including, without limitation, an interest rate floor or cap, or an option, put or call, to hedge payment, currency, rate, spread or similar exposure, between the City and a counterparty; provided that not less than 30 days prior to the City's execution of such contract or agreement, each Rating Agency which maintains a rating with respect to any Indebtedness receives notice in writing of the City's pending execution thereof; and provided further that at the time of origination each Rating Agency which maintains a rating with respect to any Indebtedness confirms in writing to the City that the City's execution and delivery of such contract will not result in a downgrading, withdrawal or suspension of such rating.

"Hedge Fixed Rate" means Hedged Fixed Rate as defined in definition of Derivative Indebtedness.

"Indebtedness" means the Bonds, any Parity Indebtedness or any Subordinate Debt.

"Insurance Company" means an insurance company with a long-term debt rating within one of the three highest rating categories by at least one of the Rating Agencies.

"Interest Account" means the Interest Account of the Bond Fund established by Section 7.1(d).

"Interest Payment Date" means any date on which a payment of interest on any Bonds or any Parity Indebtedness is due.

"Interest Period" means the period from and including an Interest Payment Date to and including the day before the next Interest Payment Date, except the first Interest Period for each Series of Bonds and Parity Indebtedness will be the period from and including the date specified in the Supplemental Indenture authorizing the Series of Bonds or the document authorizing the Parity Indebtedness for the Bonds or Parity Indebtedness to begin to bear interest to and including the day before the first Interest Payment Date.

"Master Indenture" means the Master Indenture of Trust, between the City and the Trustee, as it may be modified, altered, amended and supplemented from time to time in accordance with its terms.

"Net Proceeds" mean the proceeds from any insurance recovery remaining after payment of attorneys' fees, fees and expenses of the City and the Trustee and all other expenses incurred in collection of the gross proceeds.

"Net Revenues" mean Revenues less Operating Expenses.

"Operating Component" means the portion of the Cost of Contracted Services reasonably determined by an Authorized City Representative, in a certificate delivered to the Trustee from time to time, to be directly or indirectly attributable to the ownership or operation of the System without regard to its treatment under generally accepted accounting principles; provided, however, if no such determination is made, all of the Cost of Contracted Services will be treated as Operating Component.

"Operating Expenses" mean all expenses which may reasonably be determined by the City in its Annual Budget to be directly or indirectly attributable to the ownership or operation of the System and payable as Operating Expenses without regard to the treatment of such expenses under generally accepted accounting principles, including, without limitation, reasonable and usual expenses of administration, operation, maintenance and repair, which may include expenses not annually recurring, costs of billing and collecting the rates, fees and charges for the use of or the services furnished by the System, the Operating Component of the Cost of Contracted Services, insurance and surety bond premiums and reserves, other charges and fees necessary for the maintenance of adequate insurance coverage for the City and the System, fees and payments for any Credit Facility, legal, engineering and auditing expenses, expenses and compensation of the Trustee, reimbursement to the City's general fund for the cost of services rendered with respect to the System, and other expenses of the City required to be paid by law or under the Master Indenture or any Supplemental Indenture, but will not include (i) any allowance for amortization or depreciation, (ii) deposits or transfers to the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund, the Repair and Replacement Reserve Fund, the Rate Stabilization Fund, (iii) payments for Existing Debt Service or City Obligations and (iv) expenditures which the City makes an election to capitalize.

"Operating Fund" means the fund established by Section 7.1(c).

"Opinion of Counsel" means a written opinion of any Counsel in form and substance acceptable to the Trustee.

"Option Obligations" mean any Indebtedness which by its terms may be tendered by and at the option of its Owner or holder for purchase before its stated maturity.

"Outstanding" means, at any date, the aggregate of all Indebtedness authorized, issued, authenticated and delivered under the Master Indenture and not paid and discharged, except:

- (a) Indebtedness cancelled or surrendered to the Paying Agent for cancellation;
- (b) Indebtedness deemed to have been paid as provided in Section 14.1 or 14.2 or in such other instrument authorizing its issuance; and
- (c) Indebtedness in lieu of or in substitution for which other Indebtedness has been authenticated and delivered pursuant to the Master Indenture and any Supplemental Indenture unless proof satisfactory to the Paying Agent is presented that any such Indebtedness is held by a bona fide Owner.

In determining whether Owners of a requisite aggregate principal amount of the Outstanding Bonds or Parity Indebtedness have concurred in any request, demand, authorization, direction, notice, consent or waiver under the Indenture, the principal amount of Capital Appreciation Bonds will be their Accreted Value (as of the immediately preceding Compounding Date). Indebtedness which is owned by the City will be disregarded and deemed not to be Outstanding for the purpose of any such determination; provided, however, that for the purpose of determining whether the Trustee will be protected in relying upon any request, demand, authorization, direction, notice, consent or waiver, only Indebtedness which the Trustee knows to be so owned will be disregarded.

"Owner" means the Person in whose name a particular Bond is registered on the records of the Paying Agent or who is the holder of Parity Indebtedness.

"Parity Debt Service" means, for any period of twelve consecutive months, the Debt Service Requirement with respect to Parity Indebtedness.

"Parity Debt Service Component" means all or any portion of the Debt Service Component of the Cost of Contracted Services under the Service Contracts meeting the requirements of Section 5.5 that an Authorized City Representative, determines in a certificate delivered to the Trustee will be payable on a parity with the Bonds.

"Parity Debt Service Fund" means the fund established in Section 7.1(e).

"Parity Indebtedness" means (i) the Parity Debt Service Component of the Cost of Contracted Services and (ii) any other Parity Indebtedness incurred in accordance with Section 5.6 which is secured on a parity with the Bonds, including bonds, notes or other evidences of indebtedness issued pursuant to the Master Indenture and any Supplemental Indenture equally and ratably secured by a pledge of Net Revenues and, at the City's option, any other security pledged to such bonds, notes or other evidences of indebtedness but which are not secured by the Debt Service Reserve Fund. Parity Indebtedness may also include Bond Anticipation Notes, Hedge Agreements or obligations with respect to Credit Facilities; provided, however, Parity Indebtedness does not include any Bonds or any other indebtedness of the City issued from the time to time under any other indenture, trust agreement, ordinance, resolution or other instrument not secured by a pledge of Revenues.

"Paying Agent" means any paying agent for the Bonds (and may include the Trustee) and its successor or successors appointed pursuant to the provisions of any Supplemental Indenture. Unless otherwise provided in a Supplemental Indenture, the Trustee will be the Paying Agent.

"Person" means an individual, a corporation, a partnership, a general partner of a partnership, an association, a joint stock company, a trust, any unincorporated organization, or a governmental unit or its political subdivision.

"PILOT" means for any Fiscal Year the amount budgeted to be paid with respect to the System to the general fund of the City in lieu of taxes.

"Plain Par Investments" mean a Fixed Rate Investment:

- (a) Issued with not more than a De Minimis Amount of original issue discount or premium, or, if acquired on a date other than its issue date, acquired with not more than a De Minimis Amount of market discount or premium;
- (b) Issued for a price that does not include accrued interest other than pre-issuance accrued interest;
- (c) That bears interest from its issue date at a single, stated, fixed rate, with interest unconditionally payable at least annually; and
- (d) That has a lowest stated redemption price that is not less than its outstanding stated principal amount.

"Present Value" means the present value computed under the economic accrual method (using the same compounding interval and financial conventions used to compute the yield on the relevant Series of Bonds under Section 148 of the Code), of all unconditionally payable receipts to be received from and payments to be paid for an investment after the valuation date, using the Yield (as defined in the Tax Compliance Agreement) on the investment as the discount rate.

"Principal Account" means the Principal Account of the Bond Fund established by Section 7.1(d).

"Principal Payment Date" means any date on which a payment of principal or Accreted Value of any Bonds or any Parity Indebtedness is due.

"Principal Period" means the period from and including a Principal Payment Date to and including the day before the next Principal Payment Date, except the first Principal Period for each Series of Bonds or Parity Indebtedness will be the twelve months immediately preceding the first Principal Payment Date unless some other period is specified in the Supplemental Indenture authorizing the Series of Bonds or the Service Contract or other document authorizing the Parity Indebtedness.

"Project" will have the meaning set forth in any Supplemental Indenture.

"Project Fund" means the fund established in Section 7.1(a).

"Rate Stabilization Fund" means the Rate Stabilization Fund established by Section 7.1(i).

"Rate Stabilization Requirement" means such amount as may be established by the City pursuant to Section 7.9(c), and if no such amount is established, the Rate Stabilization Requirement will be zero.

"Rating Agency" means any nationally recognized securities rating agency then rating the Bonds at the request of the City.

"Redemption Account" means the Redemption Account of the Bond Fund established by Section 7.1(d).

"Refunding Bonds" means a Series or portion of a Series of Bonds issued to retire or refund all or any portion of another Series of Bonds, Parity Indebtedness or other obligations of the City.

"Repair and Replacement Reserve Fund" means the fund established in Section 7.1(h).

"Replacement Reserve Requirement" means an amount to be determined by the City pursuant to Section 7.8(b), but not less than \$1,000,000.

"Revenue Fund" means the fund established in Section 7.1(b).

"Revenues" mean all revenues, receipts and other income derived or received by the City from the ownership or operation of the System including, without limitation, any investment earnings and transfers, if any, from the Rate Stabilization Fund to the Revenue Fund, but excluding (i) any gift, grant or contributions to the extent restricted by the donor or grantor to a particular purpose inconsistent with its use for the payment of Senior Debt Service or Subordinate Debt Service, (ii) proceeds derived from insurance or condemnation, and (iii) any transfers from the Revenue Fund to the Rate Stabilization Fund. Any lump sum prepayment of Revenues received by the City will be reserved by the City in a subaccount in the Revenue Fund and disbursed from the subaccount and recognized as Revenues monthly over the appropriate accrual period.

"ROI" means for any Fiscal Year the amount budgeted to be paid with respect to the System to the general fund of the City as a return on the City's investment in the System.

"Senior Debt Service" means for any period of twelve consecutive months the sum of Bond Debt Service and Parity Debt Service during the period.

"Serial Bonds" mean any Bonds of a Series which are stated to mature in annual installments including any Capital Appreciation Bonds, but not including any Term Bonds.

"Series" or "Series of Bonds" mean a separate series of Bonds issued under the Master Indenture pursuant to a Supplemental Indenture.

"Service Contracts" mean any contracts or agreements for Contracted Services entered into by the City from time to time.

"Subordinate Debt" means bonds, notes or other evidences of indebtedness of the City, including the Debt Service Component of the Cost of Contracted Services and any lease which is required to be capitalized by generally accepted accounting principles which is not a Parity Debt Service Component, secured by a pledge of Net Revenues expressly made subordinate to the pledge of Net Revenues securing the Bonds and Parity Indebtedness or which is unsecured.

"Subordinate Debt Service" means for any period of twelve consecutive months the Debt Service Requirement with respect to any Subordinate Debt and the Debt Service Component of the Cost of Contracted Services which is not a Parity Debt Service Component.

"Subordinate Debt Service Fund" means the fund established in Section 7.1(g).

"Supplemental Indenture" means any indenture supplemental to or amendatory of the Master Indenture as originally executed, which is duly executed and delivered in accordance with the provisions of the Master Indenture.

"System" means the water system, owned or operated by or on behalf of the City, including but not limited to, any Project and all additions, extensions, improvements and replacements to the System, and any other utility system which may be added by the City as a part of the System pursuant to Section 9.18, but excluding any independent utility systems hereafter owned or operated by the City and accounted for separately by the City unless made part of the System by the City.

"Term Bonds" means Bonds of a Series which are stated to mature on one date and which are subject to scheduled mandatory redemption before such date.

"Test Period" has the meaning given to it in the Indenture in connection with the issuance of Additional Bonds.

"Variable Rate Indebtedness" means any Indebtedness, interest on which is not established at the time of its issuance at a rate which is fixed until its maturity.

### **Summary of Certain Provisions of the Indenture**

The following is a brief summary of certain provisions contained in the Master Indenture and the Sixth Supplemental Indenture and does not purport to be a complete statement of all of the provisions of those documents. Reference is made to the Master Indenture and the Sixth Supplemental Indenture in their entirety for complete information on their terms and on the terms of the 2005 Bonds, the applicable security provisions and the application of the Revenues. See also "DESCRIPTION OF THE 2005 BONDS" and "SECURITY AND SOURCES OF PAYMENT FOR THE BONDS" in the Official Statement.

#### **Definitions**

Unless defined below, all capitalized terms used in this Appendix have the meanings set forth in the foregoing section entitled "Definitions of Certain Terms."

### **Additional Bonds**

In connection with the issuance of Additional Bonds, the City is required to file, among other things, the following documents with the Trustee:

- (1) A certificate of the City dated as of the date of delivery of the Additional Bonds and signed by the City Manager or Director of Finance to the effect that to the best of his or her knowledge, upon and immediately following the issuance of the Additional Bonds, no event of default under the Indenture and no event or condition which, with notice or lapse of time or both, would become an event of default, will have occurred and be continuing or, if such an event or condition has occurred and is continuing, it will be cured upon the issuance of the Additional Bonds or upon completion of the Project to be financed with the Additional Bonds.
- (2) A copy of the resolution or ordinance and an executed counterpart of the supplement to the Master Indenture authorizing the Additional Bonds, which supplement will specify, among other things, the details of the Additional Bonds and the amount, if any, to be deposited from the proceeds of sale of the Additional Bonds into the Debt Service Reserve Fund.
- (3) An opinion of Bond Counsel, subject to customary exceptions and qualifications, to the effect that the issuance of the Additional Bonds has been duly authorized, that the Additional Bonds are valid and binding limited obligations of the City entitled to the benefits and security of the Master Indenture and that the interest on the Additional Bonds is excludable from gross income for purposes of federal income taxation or, if the interest is not excludable, that the issuance and the intended use of the proceeds of the Additional Bonds will have no adverse effect on the tax-exempt status of interest on any other Bonds then Outstanding, the interest on which was excludable from gross income when issued.
- (4) If the Additional Bonds are issued to pay the cost of acquiring, renovating, equipping or constructing improvements, extensions, additions or replacements to the System,
  - (a) A written statement from (i) Director of Utilities setting forth his or her estimate of the cost of the acquisition, renovation, equipping or construction (including all financing, reserves and related costs) and the date on which such acquisition, renovation, equipping or construction will be completed and (ii) the Director of Finance giving his or her opinion that the proceeds of the Additional Bonds, together with any other money available for such purpose, will be sufficient to pay the cost of the acquisition, renovation, equipping or construction; and
  - (b) The amount of the Net Revenues as received during any twelve (12) consecutive months of the twenty-four months immediately preceding the issuance of the Bonds (the "Test Period"), as certified by the Director of Finance or the Consulting Engineer, subject to adjustment as permitted in subsection (c) below, will be equal to the revenue covenant contained in Section 9.4 of the Indenture for the Test Period taking into account the maximum principal and interest payments due on (i) any Bonds and Parity Indebtedness then proposed to be issued.

- (c) Adjustments to Net Revenues permitted by the foregoing subsection, shall be certified by the Director of Finance or the Consulting Engineer to the Director of Utilities and shall be computed as follows:
- (i) If the City, before the issuance of the proposed Bonds, has increased the rates, fees, rentals or other charges for the services or use of the System, the Net Revenues for the Test Period shall be adjusted to include the Net Revenues which would have been derived from the System during the Test Period as if such increased rates, fees, rentals or other charges had been in effect during the Test Period.
- (ii) If the City has acquired or has contracted to acquire any privately or publicly owned existing water system, sewer system, solid waste collection and disposal system, stormwater retention system, or any other utility system that the City will consolidate with the System, the cost of which shall be paid from all or part of the proceeds of the issuance of the proposed Bonds, then the Net Revenues derived from the System during the Test Period shall be increased by adding to the Net Revenues for the Test Period the projected Net Revenues which would have been derived from the System as if such utility system had been operated by the City as part of the System during the Test Period.
- (iii) If the City has entered into a contract on or before the date of the issuance of the proposed Bonds or Parity Indebtedness, with any public body whereby the City has agreed to furnish services consistent with the services performed by the System, which contract (A) is for a duration of not less than the final maturity of the Bonds or Parity Indebtedness proposed to be issued, or (B) if less than the final maturity of such Bonds or Parity Indebtedness, contain provisions obligating the party contracting with the City to pay in full its allocated share of the costs of capital improvements to the System needed to carry out the terms of the contract, then the Net Revenues of the System during the Test Period shall be increased by the least amount which the entity receiving such services shall be required to pay by the terms of the contract in any one year during which the City is to furnish services and such Bonds or Parity Indebtedness are anticipated to be Outstanding, after deducting from such payment the estimated proportion of operating expenses and repair, renewal and replacement cost attributable in such year to such services.
- (iv) If there is an estimated increase in Revenues to be received by the City, as a result of additions, extensions or improvements to the System during the period of three years after delivery of the Bonds and the governing body of the City has by ordinance or resolution authorized the additions, extensions or improvements (and if such additions, extensions or improvements involve another jurisdiction, the governing body of such other jurisdiction has also given its approval by ordinance or resolution), then the Net Revenues derived from the System during the Test Period will be increased by the estimated average annual additional Net Revenues for the first two full years after such additions, improvements or extensions have been placed in service.

In connection with any Net Revenue adjustment permitted by subparagraphs (ii), (iii) or (iv) above, the City may take into account any increases in rates, fees or charges that have been approved by the City at the time of certification.

- (5) If the Additional Bonds are issued to refund any of the Bonds or other Parity Indebtedness of the City issued under the Indenture,
  - (a) Evidence satisfactory to the Trustee that the City has made provision as required by the Indenture for the payment or redemption of all Bonds or Parity Indebtedness of the City to be refunded;
  - (b) A written determination by the Trustee or by a firm of independent certified public accountants that the proceeds (excluding accrued interest) of the refunding bonds, together with any other money deposited with the Trustee for such purpose and the investment income to be earned on funds held by the Trustee for the payment or redemption of Bonds or Parity Indebtedness, will be sufficient to pay,

whether upon redemption or at maturity, the principal of and premium, if any, and interest on the Bonds or Parity Indebtedness to be refunded and the estimated expenses incident to the refunding; and

- (c) (i) A written determination by the Trustee or by a firm of independent certified public accountants that after the issuance of the refunding bonds and the provision for payment or redemption of all Bonds or Parity Indebtedness of the City to be refunded, the Senior Debt Service for each Fiscal Year in which there will be Outstanding Bonds of any Series not to be refunded will be not more than the Senior Debt Service for the Fiscal Year would have been on all Outstanding Bonds and Parity Indebtedness immediately before the issuance of the refunding bonds, including the Bonds and Parity Indebtedness of the City to be refunded; or (ii) in the case of Refunding Bonds issued to refund Parity Indebtedness issued under the Master Indenture in the form of Bond Anticipation Notes, the City shall provide the written certification required in 4(b) above.
- (6) If the Additional Bonds are issued to refund obligations of the City with respect to the System other than Bonds or Parity Indebtedness, the certifications similar to those required in 5(a) and 4(b) above.

The proceeds of Additional Bonds (including accrued interest) will be applied as set forth in the Sixth Supplemental Indenture authorizing their issuance.

### **Parity Indebtedness**

The City may designate the Debt Service Component of the Cost of Contracted Services as Parity Indebtedness and may issue or refinance other Parity Indebtedness provided the requirements of paragraphs (4) or (5), as appropriate, for the issuance of Additional Bonds are met as if the Parity Indebtedness was a series of Additional Bonds. Parity Indebtedness will be secured by the pledge of Net Revenues under the Indenture on a parity with Bonds issued under the Indenture, except Parity Indebtedness will not be secured by money in the Project Fund, the Bond Fund or the Debt Service Reserve Fund.

### **Subordinate Debt**

Nothing in the Indenture prohibits or prevents the City from issuing Subordinate Debt for any lawful purpose payable from and secured by a pledge of Net Revenues subject and subordinate to the payment of any Bonds and Parity Indebtedness; provided, however, any Subordinate Debt may only be declared immediately due and payable if payment of the Bonds and Parity Indebtedness has been accelerated in accordance with the Indenture.

### **Establishment of Funds and Accounts**

The following funds are established under the Indenture, to be held as follows:

- (1) City of Norfolk, Virginia, Project Fund, to be held by or at the direction of the City;
- (2) City of Norfolk, Virginia, Revenue Fund, to be held by or at the direction of the City;
- (3) City of Norfolk, Virginia, Operating Fund, to be held by or at the direction of the City;
- (4) City of Norfolk, Virginia, Bond Fund, in which there is established an Interest Account, a Principal Account and a Redemption Account and a Capitalized Interest Account, to be held by the Trustee;
- (5) City of Norfolk, Virginia, Parity Debt Service Fund, to be held by or at the direction of the City;
- (6) City of Norfolk, Virginia, Debt Service Reserve Fund, to be held by the Trustee;
- (7) City of Norfolk, Virginia, Subordinate Debt Service Fund, to be held by or at the direction of the City;

- (8) City of Norfolk, Virginia, Repair and Replacement Reserve Fund, to be held by or at the direction of the City;
- (9) City of Norfolk, Virginia, Rate Stabilization Fund, to be held by or at the direction of the City; and
  - (10) City of Norfolk, Virginia, General Reserve Fund, to be held by or at the direction of the City.

### **Project Fund**

The proceeds of the 2005 Bonds will be deposited in the Project Fund and used to pay costs of the 2005 Project. The City will maintain for each Series of Bonds a separate subaccount. Net Proceeds used to repair, restore or reconstruct the System will also be deposited in the Project Fund and maintained within separate subaccounts for each Series of Bonds.

### **Revenue Fund**

The City will collect and deposit in the Revenue Fund as received all Revenues. Money on deposit in the Revenue Fund will be used as follows:

- (1) To make monthly deposits to the Operating Fund in an amount such that the balance on deposit in the Fund will be equal to not less than one-sixth of the Operating Expenses budgeted to be paid from the Fund in the current Annual Budget;
- (2) To make equal monthly deposits to the Bond Fund and Parity Debt Service Fund so that there will be sufficient money in the Funds to pay the Bonds and Parity Indebtedness when due;
  - (3) To restore any deficit in the Debt Service Reserve Fund;
- (4) To make deposits to the Subordinate Debt Service Fund of amounts determined by the City to be necessary to pay Subordinate Debt when due;
- (5) To make deposits to the Repair and Replacement Reserve Fund to accumulate the Replacement Reserve Requirement in thirty-six approximately equal installments and then to restore any deficit in sixty approximately equal monthly installments;
- (6) To make other deposits to the Repair and Replacement Reserve Fund in amounts determined by the City;
- (7) To make deposits to the Rate Stabilization Fund to accumulate the Rate Stabilization Requirement in twenty-four approximately equal installments and thereafter to restore any deficit in such Fund in the same number of installments; and
  - (8) To make deposits of any remaining balance to the General Reserve Fund.

### **Operating Fund**

The City will pay Operating Expenses from the Operating Fund as they become due and in accordance with the purposes and amounts provided in the Annual Budget. In the event the balance in the Operating Fund is insufficient for its purposes, the City will transfer to the Operating Fund such amounts as may be necessary first from the General Reserve Fund and then from the Repair and Replacement Reserve Fund. The City may also make transfers from the Rate Stabilization Fund to the Operating Fund to cover any deficit and may do so before, in combination with, or in lieu of transfers from the General Reserve Fund and the Repair and Replacement Reserve Fund. Interest received on and any profit realized from the investment of money in the Operating Fund will be transferred as earned to the Revenue Fund.

### **Bond Fund**

The Trustee will pay the principal of and interest on the Bonds when due from the Principal Account and the Interest Account, respectively. The Trustee will use money in the Redemption Account of the Bond Fund to redeem Bonds pursuant to any optional redemption provision exercised by the City. In the event the balances on deposit in the Principal Account or the Interest Account are insufficient, the Trustee will transfer to such Accounts the amount necessary to pay the Bonds from the Debt Service Reserve Fund after making transfers first from the General Reserve Fund, the Repair and Replacement Reserve Fund and the Rate Stabilization Fund. Interest received on and any profit realized from the investment of money in the Bond Fund will become a part of the account in the Bond Fund in which the investment is held.

### **Parity Debt Service Fund**

The City will use money in the Parity Debt Service Fund to make payments on any Parity Indebtedness when due. Interest received on and any profit realized from the investment of money in the Parity Debt Service Fund will be deposited when received in the Revenue Fund. Amounts in the Parity Debt Service Fund do not secure the 1993 Bonds, the 1995 Bonds, the 1998 Bonds, the 2001 Bonds, the 2005 Bonds or any Additional Bonds.

### **Debt Service Reserve Fund**

The Debt Service Reserve Fund will be used by the Trustee to make transfers to the Bond Fund to the extent necessary to pay the principal of and interest on the Bonds when due if the amounts on deposit in the Principal and Interest Accounts of the Bond Fund, and any amounts transferred by the City to the Debt Service Reserve Fund from the General Reserve Fund and the Repair and Replacement Reserve Fund are insufficient for such purpose. In the event the amount on deposit in the Debt Service Reserve Fund is less than the Debt Service Reserve Requirement, the City will transfer funds from the Revenue Fund to the Debt Service Reserve Fund to restore the Debt Service Reserve Requirement in the manner provided in the Master Indenture. If the balance in the Debt Service Reserve Fund is equal to the Debt Service Reserve Fund Requirement, any interest received and profit realized from the investment of money in the Debt Service Reserve Fund will be transferred to the Interest Account of the Bond Fund, unless otherwise provided in any Supplemental Indenture.

In lieu of maintaining and depositing money or securities in the Debt Service Reserve Fund, the City may deposit with the Trustee a letter of credit, bond insurance policy or surety bond in an amount equal to all or a portion of the Debt Service Reserve Requirement, provided the issuer of the letter of credit or surety bond or the bond insurer, as appropriate, is rated in one of the two highest long-term debt rating categories by the Rating Agencies then rating the Bonds, without regard to any refinement or gradation of such rating category by numerical modifier or otherwise. Any letter of credit, bond insurance policy or surety bond will permit the Trustee to draw or obtain amounts under it for deposit in the Debt Service Reserve Fund that, together with any money already on deposit in the Debt Service Reserve Fund, are not less than the Debt Service Reserve Requirement.

The Trustee will make a drawing on the letter of credit or obtain funds under the bond insurance policy or surety bond before its expiration or termination (1) whenever money is required for the purposes for which Debt Service Reserve Fund money may be applied and (2) unless the letter of credit or bond insurance policy has been extended or a qualified replacement for it delivered to the Trustee, in the event the City has not deposited money in immediately available funds equal to the Debt Service Reserve Requirement at least two Business Days preceding the expiration or termination of the letter of credit, bond insurance policy or surety bond.

If the City provides the Trustee with a letter of credit, bond insurance policy or surety bond, the Trustee will transfer the funds then in the Debt Service Reserve Fund to the City, provided the City delivers to the Trustee an opinion of Bond Counsel that such transfer of funds will not adversely affect the exclusion from gross income for purposes of federal income taxation of interest on any 2005 Bonds and the City covenants to comply with any directions or restrictions contained in such opinion concerning the use of the funds.

### **Subordinate Debt Service Fund**

The City will use money in the Subordinate Debt Service Fund to make payments of debt service on any Subordinate Debt when due. Interest received on and any profit realized from the investment of money in the Subordinate Debt Service Fund will be deposited when received in the Revenue Fund.

### **Repair and Replacement Reserve Fund**

The City may use amounts in the Repair and Replacement Reserve Fund for any of the following purposes:

- (1) Reasonable and necessary expenses with respect to the System for major repairs, replacement or maintenance of items of a type not recurring annually;
  - (2) To pay costs of reconstruction of parts of the System;
  - (3) To pay costs of construction of parts of the System;
  - (4) To pay any capital costs with respect to the System;
  - (5) To make payments on Service Contracts; or
- (6) To make deposits to the Revenue Fund, the Operating Fund, the Bond Fund, the Parity Debt Service Fund or the Debt Service Reserve Fund.

At least biennially, the City agrees to review the adequacy of the amount of the Replacement Reserve Requirement under then current operating conditions, and in light of then applicable operating, replacement and maintenance costs of the major components of comparable systems. If at any time the City determines in its judgment that the amount of the Replacement Reserve Requirement should be increased or decreased, it will notify the Trustee of its determination setting forth the amount of the new Replacement Reserve Requirement. The new Replacement Reserve Requirement will take effect on the date of the receipt of the notice by the Trustee unless some other effective date is specified in the notice in which case the date specified in the notice will control. In no event will such requirement be reduced below \$1,000,000.

If the amount on deposit in the Repair and Replacement Reserve Fund exceeds the Replacement Reserve Requirement, the City may transfer the excess to the Rate Stabilization Fund or the General Reserve Fund.

### **Rate Stabilization Fund**

The City may at its option make transfers from the Rate Stabilization Fund to the Revenue Fund and amounts so transferred will be deemed Revenues. Interest earnings or any profit from investing the Rate Stabilization Fund will be transferred at least monthly to the Revenue Fund.

The City may at any time reduce or increase the balance in the Rate Stabilization Fund to any amount, including zero upon certification of the Director of Finance setting forth the amount to be withdrawn or added. Upon satisfaction of the requirements set forth above, the amount of the reduction in the Rate Stabilization Fund will be transferred from the Rate Stabilization Fund to the Revenue Fund, unless otherwise specified in a Supplemental Indenture.

### **General Reserve Fund**

Money on deposit in the General Reserve Fund may be used for any lawful purpose. The City has agreed to use money in the General Reserve Fund to cure deficits in the Operating Fund, the Bond Fund, the Parity Debt

Service Fund and the Debt Service Reserve Fund. Money in the General Reserve Fund is not pledged to secure the Bonds or Parity Indebtedness.

#### **Investments**

Any money held in any funds and accounts established by the Indenture, except the Bond Fund and the Debt Service Reserve Fund, may be separately invested and reinvested by the Trustee, at the request of and as directed by an Authorized Representative of the City, in any of the following investments which are at the time legal investments for public funds under the Investment of Public Funds Act, Chapter 18, Title 2.1, Code of Virginia of 1950, as amended ("Investment Act"), or any subsequent provision of law applicable to such investments:

- (1) Bonds, notes and other evidences of indebtedness to which the full faith and credit of the Commonwealth is pledged for the payment of principal and interest or which are unconditionally guaranteed as to the payment of principal and interest by the Commonwealth and which are rated on one of the two highest debt rating categories by at least one of the Rating Agencies;
  - (2) Government Obligations;
  - (3) Government Certificates;
- (4) Bonds, notes and other evidences of indebtedness of any county, city, town, district, authority or other public body of the Commonwealth which are rated in one of the two highest long-term debt rating categories by at least one of the Rating Agencies;
- (5) Savings accounts, time deposits and certificates of deposit in any Bank, including the Trustee and its affiliates, or savings and loan association within the Commonwealth, provided that the funds are secured in the manner required by the Virginia Security for Public Deposits Act or any successor legislation and no deposit will be made for more than five years;
- (6) Obligations of the Export-Import Bank, the Farmers Home Administration, the General Services Administration, the United States Maritime Administration, the Small Business Administration, the Government National Mortgage Association, the Department of Housing and Urban Development and the Federal Housing Administration, provided such obligations represent the full faith and credit of the United States;
- (7) Bonds, notes or other evidences of indebtedness of the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Federal Home Loan Bank and the Federal Farm Credit Bank;
- (8) Commercial paper issued by corporations, including banks and bank holding companies, organized under the laws of the United States or any State which is rated by Moody's Investors Service, Inc., or its successor, within its NCO/Moody's rating of prime 1 and by Standard & Poor's Corporation, or its successor, within its rating of A-1, and which matures not more than 270 days after the date of its purchase;
- (9) Corporate notes with a rating of at least Aa by Moody's and AA by Standard & Poor's Corporation with a maturity of not more than five years;
- (10) Banker's acceptance, as permitted by the Investment Act, with banks rated in one of the two highest debt rating categories by at least one of the Rating Agencies;
- (11) Investments pursuant to the Government Non-Arbitrage Act, Article 7.1, Chapter 14, Title 2.1 of the Virginia Code; and
- (12) Such other investments as may be permitted by the Investment Act; provided they are rated within one of the two highest rating categories by at least one of the Rating Agencies.

Any money held by the Trustee in the Bond Fund will be separately invested and reinvested by the Trustee, at the request of and as directed by an Authorized City Representative, only in investments described in subsections (1), (2), (3), (4) and (5) above, which are at the time legal investments for public sinking funds under the Investment Act, or any subsequent provisions of law applicable to such investments.

Any money held by the Trustee in the Debt Service Reserve Fund will be separately invested and reinvested by the Trustee, at the request of and as directed by an Authorized City Representative, only in investments described in subsections (1), (2), (3), (4), (5), (6) and (7) above.

Any investments described above may be purchased by the Trustee or the City pursuant to an overnight term or open repurchase agreement in accordance with the provisions of the Indenture.

Investments in a money market fund or in the shares of any other management type investment company registered under the Investment Company Act of 1940, the investments of which fund or company are exclusively in obligations or securities described in paragraphs (1), (2), (3), (4), (6) or (7) above, will be considered investments in obligations described in such subsections, provided that the fund or company, which investments are comprised exclusively of the obligations described in subsections (1), (4) or (7), is rated in the highest debt rating category by at least one of the Rating Agencies.

Subject to the provisions of any Supplemental Indenture, all investments will be held by or under the control of the Trustee or the City, as the case may be, and while so held will be deemed a part of the fund or account in which the money was originally held. Except as otherwise specifically provided in the Master Indenture or any Supplemental Indenture, the interest received on and any profit realized from such investments will be transferred not less frequently than monthly to the City for deposit in the Revenue Fund. The Trustee and the City will sell and reduce to cash a sufficient amount of such investments whenever the cash balance in any fund or account is insufficient for its purpose.

Investments of money in the Debt Service Reserve Fund must mature or be payable at the option of the Trustee for purposes of the Debt Service Reserve Fund not more than ten years after the date of their purchase.

Money in funds and accounts held by the City may be pooled and commingled for purposes of investment.

Investments are subject to change to the extent and in the manner permitted by subsequent modification or amendment to the Investment Act; provided, however, any rating limitations imposed by the Indenture on a particular type or category of investment will apply to any additional permitted investments of the same or similar type or category.

### **Particular Covenants**

<u>Compliance with Indenture; Payment of Bonds</u>. In the Indenture, the City covenants to perform its obligations under the Indenture and related documents and to pay the Bonds, but only from the Net Revenues and other funds specifically pledged for such purpose.

Revenue Covenant. The City will establish, fix, charge and collect rates, fees and other charges for the use of and for the services furnished by the System, and will, from time to time and as often as appears necessary, revise such rates, fees and other charges, so that in each Fiscal Year Net Revenues are not less than the greater of (i) the sum of 1.1 times Senior Debt Service and 1.0 times Subordinated Debt Service for the Fiscal Year and (ii) 1.0 times the funding requirements for transfers from the Revenue Fund to the Operating Fund, the Bond Fund, the Parity Debt Service Fund, the Debt Service Reserve Fund, the Subordinate Debt Service Fund and the Repair and Replacement Reserve Fund as set forth in Section 7.2(a) of the Indenture.

Billing; Enforcement of Charges; Free Service. The City will bill the users of the services of the System no less frequently than quarterly, except in the case of wholesale customers who will be billed as provided in the contract between the City and the wholesale customer. The City has agreed to take all appropriate steps to enforce collection of any overdue charges by any remedy available at law or in equity. The City will not permit connection

with or the use of the System, or furnish any services of the System, without making a charge based on the City's schedule of rates, fees and charges, except for connections and service for fire protection purposes.

Sale or Encumbrance. The City may grant easements, licenses or permits across, over or under parts of the System for streets, roads and utilities as will not adversely affect the use of the System. The City may sell or otherwise dispose of any property constituting a part of the System which is either no longer needed or useful or is replaced from the proceeds of the disposition and any other necessary money with property serving the same or similar function. If the proceeds received from a sale or disposition not used to replace property exceeds \$100,000, the proceeds will at the option of the City be (1) applied to the payment or redemption of Bonds then Outstanding and Parity Indebtedness in a manner which in the opinion of Bond Counsel will not adversely affect the exclusion from gross income for purposes of federal income taxation of interest on any Bonds the interest on which was excludable on the date of their issuance or (2) deposited in the Repair and Replacement Reserve Fund and applied solely to pay the costs of capital improvements to the System. The City may transfer all or substantially all of the assets of the System to an authority or special purpose political subdivision; provided, the City's obligations under the Indenture are assumed in writing, the City receives an Opinion of Bond Counsel that the exempt status of the interest income on the Bonds will not be adversely affected and upon compliance with certain other conditions in the Indenture. The City may add to the System sewer systems, solid waste systems, storm water systems and other utilities on certain terms and conditions set forth in the Indenture similar to those regarding the transfer of System assets.

<u>Creation of Liens</u>. The City has agreed not to create or suffer to be created any lien or charge upon the System, except as provided in the Indenture.

<u>Insurance</u>. To the extent such insurance is available at reasonable costs, the City has agreed to continuously maintain and pay the premiums on insurance against such risks as are customarily insured against by other entities owning and operating similar systems.

Damage, Destruction, Condemnation and Loss of Title. If all or any part of the System is destroyed or damaged by fire or other casualty, condemned or lost by failure of title, the City will restore promptly the property damaged or destroyed to substantially the same condition as before the damage, destruction, condemnation or loss of title with such alterations and additions as the City may determine and which will not impair the capacity or character of the System for the purpose for which it then is being used or is intended to be used. The Trustee will apply as much as may be necessary of the Net Proceeds received on account of any the damage, destruction, condemnation or loss of title to payment of the cost of such restoration, either on completion or as the work progresses. If the Net Proceeds are not sufficient to pay in full the cost of the restoration and other funds are not available for such purpose, the City will pay from the Repair and Replacement Reserve Fund or the General Reserve Fund so much of the cost as may be in excess of such Net Proceeds. Any balance of Net Proceeds remaining after payment of the cost of restoration will be deposited in the Repair and Replacement Reserve Fund.

<u>Financial Records and Statements</u>. The City will keep proper books of records and accounts, in which full and correct entries will be made in accordance with generally accepted accounting principles, of all of its business and affairs. The City will cause an audit of its records and accounts to be made by an independent certified public accountant at the end of each Fiscal Year.

Arbitrage and Tax Covenants. The City has covenanted that it will comply throughout the term of the 2005 Bonds with the requirements of Section 148 of the Code applicable to them, including the rebate and reporting requirements of Section 148(f), and that the City will not take or omit to take any action that would cause interest on any of the 2005 Bonds to be or to become includable in the gross income of the Owners for purposes of federal income taxation.

### **Events of Default**

Each of the following events is an Event of Default under the Indenture:

(1) Payment of any interest on any Bond or Parity Indebtedness is not made when due and payable;

- (2) Payment of the principal of or premium, if any, on any Bond or Parity Indebtedness is not made when due and payable;
- (3) Subject to certain rights of the City to cure such defaults as set forth in the Master Indenture, default in the observance or performance of any other covenant, condition or agreement on the part of the City under the Master Indenture, any Supplemental Indenture, in the Bonds or any document under which Parity Indebtedness has been issued; or
- (4) Appointment by a court of competent jurisdiction of a receiver for all or any substantial part of the Revenues and other funds of the City pledged pursuant to the Master Indenture, or the filing by the City of any petition for reorganization of the City or rearrangement or readjustment of the obligations of the City under provisions of any applicable bankruptcy or insolvency law.

### Remedies; Rights of Bondholders

The rights and remedies of bondholders on default are subject to certain rights of MBIA Insurance Corporation as described in the section to this Appendix "Certain Rights of MBIA Insurance Corporation."

Upon the occurrence and continuation of an event of default under the Indenture, the Trustee may, and if requested by the Owners of not less than 25% in aggregate principal amount of Bonds and Parity Indebtedness then Outstanding will, by notice to the City, declare the entire unpaid principal of, Accreted Value of and interest on the Bonds and Parity Indebtedness due and payable. Upon any such declaration the City will pay to the Owners the entire unpaid principal of and accrued interest on the Bonds and Parity Indebtedness, but only from the Net Revenues and the other funds specifically pledged in the Indenture for such purpose.

Upon the occurrence and continuation of an event of default under the Indenture the Trustee may pursue any available remedy, at law or in equity, to enforce the payment of the principal of, Accreted Value of, premium, if any, and interest on the Bonds and Parity Indebtedness, to enforce any covenant or condition under the Indenture or to remedy any event of default.

Upon the occurrence and continuation of an event of default under the Indenture, if requested to do so by the Owners of at least 25% in aggregate principal amount of Bonds and Parity Indebtedness then Outstanding and if indemnified as provided in the Indenture, the Trustee will exercise such of the rights and powers conferred by the Indenture as the Trustee, upon being advised by counsel, deems most effective to enforce and protect the interests of the Owners.

Anything in the Indenture to the contrary notwithstanding the Owners of a majority in aggregate principal amount of Bonds and Parity Indebtedness then Outstanding will have the right, upon providing satisfactory security and indemnity to the Trustee, by an instrument in writing executed and delivered to the Trustee, to direct the method and place of conducting all remedial proceedings to be taken by the Trustee under the Indenture.

No Owner of any Bonds or Parity Indebtedness will have any right to institute any suit action or proceeding in equity or at law for the enforcement of the Indenture or any remedy under the Indenture or the Bonds except as expressly provided in the Indenture.

### Waiver of Events of Default

The rights and remedies of bondholders to waive events of default are subject to certain rights of MBIA Insurance Corporation as described in the section to this Appendix "Certain Rights of MBIA Insurance Corporation."

The Trustee will waive any event of default under the Indenture and its consequences and rescind any declaration of acceleration upon the written request of the Owners of a majority in aggregate principal amount of all Outstanding Bonds and Parity Indebtedness. If any event of default with respect to the Bonds and Parity Indebtedness has been waived as provided in the Master Indenture, the Trustee will promptly give written notice of

the waiver to the City and by first class mail, postage prepaid, to all Owners of Outstanding Bonds and Parity Indebtedness if the Owners had previously been given notice of the event of default. No waiver, rescission and annulment will extend to or affect any subsequent event of default or impair any right, power or remedy available under the Master Indenture.

### **Discharge of Indebtedness**

If (1) all Bonds and Parity Indebtedness secured by the Indenture have become due and payable or irrevocable instructions to redeem the Bonds and Parity Indebtedness or to pay them at maturity have been given by the City to the Trustee and (2) the Trustee holds cash or noncallable Government Obligations or Government Certificates the principal of, Accreted Value of, and the interest on which at maturity will be sufficient (i) to redeem in accordance with the relevant section of the Indenture all Bonds and Parity Indebtedness that have been called for redemption on the date set for such redemption, (ii) to pay at maturity all Bonds and Parity Indebtedness not irrevocably called for redemption, (iii) to pay interest accruing on all Bonds and Parity Indebtedness until their redemption or payment at maturity, and (iv) to pay to the Trustee its reasonable fees and expenses, including the costs and expenses of canceling and discharging the Indenture, the Trustee will cancel and discharge the Indenture, and assign and deliver to the City any property at the time subject to the Indenture that may then be in its possession, except funds or securities in which such funds are invested which are held by the Trustee for the payment of principal of, Accreted Value of, or premium, if any, or interest on the Bonds and Parity Indebtedness.

Bonds and Parity Indebtedness will be deemed paid and no longer Outstanding for the purposes of the Indenture when there has been deposited with the Trustee cash or noncallable Government Obligations or Government Certificates the principal of, Accreted Value of, and interest on which will be sufficient to pay or redeem such Bonds and Parity Indebtedness and to pay interest on them to their payment or redemption date (whether on or before the date of their maturity or their redemption date), however, that if such Bonds and Parity Indebtedness are to be redeemed before their maturity, notice of the redemption must have been duly given or irrevocable instructions to redeem such Bonds and Parity Indebtedness must have been given to the Trustee.

### **Modification or Amendment of the Indenture**

The rights of bondholders to consent to the modification or amendment of the Indenture are subject to certain rights of MBIA Insurance Corporation as described in the section to this Appendix "Certain Rights of MBIA Insurance Corporation."

The City and the Trustee may, without consent of, or notice to, any of the Owners, enter into an agreement or agreements supplemental to the Indenture for any one or more of the following purposes:

- (1) To add to the covenants and agreements of the City contained in the Master Indenture and any Supplemental Indentures other covenants and agreements, and to surrender any right or power in the Master Indenture and any Supplemental Indentures reserved to or conferred upon the City;
- (2) To cure any ambiguity, to supply any omission or to cure, correct or supplement any defect or inconsistent provisions contained in the Master Indenture or any Supplemental Indenture;
- (3) To grant to the Trustee for the benefit of the Owners additional rights, remedies, powers or authority;
  - (4) To subject to the Master Indenture and the Supplemental Indentures additional collateral;
- (5) To modify the Master Indenture, any Supplemental Indenture, or the Bonds or Parity Indebtedness to permit qualification under the Trust Indenture Act of 1939 or any similar federal statute at the time in effect, or to permit the qualification of the Bonds for sale under the securities laws of any state of the United States;
  - (6) To provide for uncertificated Bonds or Parity Indebtedness;

- (7) To evidence the succession of a new Trustee or Paying Agent or the appointment by the Trustee or the City of a Co-Trustee or a Co-Paying Agent and to specify the rights and obligations of such Co-Trustee or Co-Paying Agent;
- (8) To make any change (including but not limited to a change to reflect any amendment to the Code or interpretations of it by the Treasury Department or the Internal Revenue Service) that in the opinion of the Trustee does not materially adversely affect the rights of any Owner of any Bonds or Parity Indebtedness;
- (9) To make any modifications or changes necessary or appropriate to issue an additional Series of Bonds or any Parity Indebtedness; or
- (10) To make any modifications or changes necessary or appropriate to permit Bonds of any Series or Parity Indebtedness to be secured by a credit or liquidity facility or to accommodate the issuance of Bonds or Parity Indebtedness bearing variable interest rates, including the addition of provisions for the appointment of tender agents and similar parties and the specification of the duties and powers of such parties that in the opinion of the Trustee does not materially adversely affect the rights of any Owner of any Bonds or Parity Indebtedness.

Any other modification or alteration of the Master Indenture and any Supplemental Indenture or the rights and obligations of the City or of the Owners of the Bonds or Parity Indebtedness may be made by the City and the Trustee with the consent of (1) the Owners of a majority in aggregate principal amount of the Bonds and Parity Indebtedness then Outstanding; or (2) in case less than all of the Bonds and Parity Indebtedness then Outstanding are affected by the modifications or amendments, the Owners of a majority in aggregate principal amount of the Bonds and Parity Indebtedness so affected then Outstanding. However, without the consent of each Owner affected, no modification or alteration may (i) extend the maturity of the principal of, or interest on, any Bond or Parity Indebtedness, (ii) reduce the principal amount of, or rate of interest on, any Bond or Parity Indebtedness, (iii) effect a privilege or priority of any Bond or Bonds over any other Bond or Bonds, (iv) reduce the percentage of the principal amount of the Bonds or Parity Indebtedness required for consent to such modification or alteration, (v) if applicable, impair the exclusion of interest on any Bonds or Parity Indebtedness from gross income for purposes of federal income taxation, (vi) eliminate or extend the mandatory redemption date of any Bonds or Parity Indebtedness or reduce the redemption price of Bonds or Parity Indebtedness, (vii) create a lien ranking prior to or on a parity with the lien of the Master Indenture or (viii) deprive any Owner of the lien created by the Master Indenture on such property.

### **Certain Rights of MBIA Insurance Corporation**

The Sixth Supplemental Indenture provides for the exercise of certain rights and remedies under the Master Indenture by MBIA Insurance Corporation. Upon the occurrence and continuance of an event of default under the Master Indenture, MBIA Insurance Corporation may exercise all rights and remedies granted to Owners of the 2005 Bonds under the Master Indenture, including the right to waive any such default. The exercise of certain of the City's rights with respect to the 2005 Bonds under the Master Indenture will be subject to the prior consent of MBIA Insurance Corporation. In addition, so long as the Bond Insurance Policy is in effect with respect to the 2005 Bonds, MBIA Insurance Corporation has imposed certain additional limitations on the City's rights under various covenants contained in the Master Indenture. The Sixth Supplemental Indenture contains all of the terms and conditions imposed upon the City by MBIA Insurance Corporation.



CERTAIN INFORMATION CONCERNING THE CITY



#### INTRODUCTION

The City of Norfolk was established as a town in 1682, as a borough in 1736 and incorporated as a city in 1845. The City is the economic, business, educational and cultural center of Southeastern Virginia. The City lies at the mouth of the James and Elizabeth Rivers and the Chesapeake Bay, and is adjacent to the Atlantic Ocean and the cities of Virginia Beach, Portsmouth and Chesapeake.

Table D-1 City of Norfolk, Virginia Area of City

<u>Year</u>	<b>Square Miles</b>
1950	37.19
1960	61.85
1970	61.85
1980	65.75
1990	65.98
2000	65.98
2004	65.98

#### **CITY GOVERNMENT**

Norfolk is an independent, full-service City with sole local government taxing power within its boundaries. It derives its governing authority from a charter (the "Charter"), originally adopted by the General Assembly of Virginia in 1918, which authorizes a council-manager form of government. The City Council exercises all of the governmental powers conferred upon the City and consists of seven members elected to office under a ward-based system, with two members elected from City-wide super wards. The City Council elects a Mayor and a Vice Mayor from among its members. Among the City officials appointed by the City Council is the City Manager, the administrative head of the municipal government. The City Manager carries out its policies, directs business procedures and appoints, with the power to remove, the heads of departments and other employees of the City except those otherwise specifically covered by statutory provisions. The City Council also appoints certain boards, commissions and authorities of the City.

#### **Certain Elected Officials**

The City's current elected officials include:

#### Paul D. Fraim, Mayor

Mayor Fraim, representing Ward 2, was elected Mayor in July 1994 and is serving the City in this capacity for his fifth consecutive term. He is president of the law firm Heilig, McKenry, Fraim & Lollar, P.C., and was first elected to City Council in 1986. He has a B.A. degree from Virginia Military Institute, Lexington, Virginia, and a Masters in Education from the University of Virginia, Charlottesville, Virginia. He received his Law degree from the University of Richmond, Richmond, Virginia. Mayor Fraim is an active member of the Virginia State Bar, the Virginia Bar Association and the Norfolk-Portsmouth Bar Association and has held a number of leadership positions in these organizations.

## Daun S. Hester, Vice Mayor

Mrs. Daun Hester, representing Super Ward 7, was first elected to City Council in July 1996. Mrs. Hester is currently employed as Coordinator of Student Affairs for Norfolk Public Schools. She received a B.S. degree from

Virginia State University, Petersburg, Virginia, and a Master of Arts in Education and Human Development from The George Washington University, Washington, D.C. Mrs. Hester is active in many local professional organizations.

#### Anthony L. Burfoot, Council Member

Mr. Burfoot, representing Ward 3, was first elected to City Council in July 2002. He is a Sales Representative for Liberty Mutual Group in Chesapeake, Virginia. He received a Bachelor of Science degree in Public Administration and a Master's degree in Educational and Administrative Supervision from Virginia State University. He is involved in many civic and business activities.

#### Paul R. Riddick, Council Member

Mr. Riddick, representing Ward 4, was first elected to City Council in 1992. He is the owner of Riddick Funeral Service. He attended Norfolk State University, Norfolk, Virginia, and has an A.A.S. degree in Funeral Service from John Tyler Community College, Chester, Virginia. Mr. Riddick is active in many local professional organizations.

#### Donald L. Williams, Council Member

Mr. Williams, representing Ward 1, was first elected to City Council in July 2002. Prior to running for Council, Mr. Williams served as a delegate in the Virginia House of Delegates from 1998-2001. He is currently president and a broker at the Hampton Roads Housing Center. He attended Old Dominion University and obtained a broker's license in 1983. Mr. Williams is active in many civic and business activities.

#### Barclay C. Winn, Council Member

Mr. Winn, representing Super Ward 6, was first elected to City Council in July 2000. He is the co-owner of Winn Nursery of Virginia, Inc. He received a Bachelor of Science degree from North Carolina State University, Raleigh, North Carolina. Mr. Winn is active in many civic and business activities.

# W. Randy Wright, Council Member

Mr. Wright, representing Ward 5, was first elected to City Council in July 1992. He is the owner of Randy Wright Printing and Publishing. He is involved in many civic and business activities.

#### **Certain Appointed Officials**

#### Regina V.K. Williams, City Manager

Regina V.K. Williams assumed the post of Norfolk City Manager in January 1999. Her responsibilities include the supervision of the administrative operations of the City and the preparation of its annual budget. She served as City Manager for the City of San Jose, California for five years and previously served as Assistant City Manager for five years. Prior to serving in San Jose, Mrs. Williams was Deputy City Manager and Chief of Staff for the City of Richmond, Virginia. In 1982, Mrs. Williams was appointed by then Virginia Governor Charles Robb as the first female and first African American to be State Director of Personnel and Training. In 1991, she was inducted as a fellow into the National Academy of Public Administration (NAPA). In 1988, Mrs. Williams was elected to a vice-presidency of the Board of Directors for the International City-County Management Association (ICMA). She was awarded the designation of manager of the year in September 2002 by ICMA. Mrs. Williams also served as the President of the National Forum of Black Public Administrators in 1995-96 and is a founder and former President of the Richmond, Virginia Chapter of the Conference of Minority Public Administrators. She earned her Bachelor of Science Degree from Eastern Michigan University, Ypsilanti, Michigan and a Masters degree in Public Administration from Virginia Commonwealth University, Richmond, Virginia.

#### Steven G. de Mik, Director of Finance

Steve de Mik commenced his tenure as Director of Finance on September 1, 2000. At the direction of the City Manager, he is responsible for identifying strategic opportunities for the City in the policy areas of taxation, financial management, fiscal policy development and instruction and economic development. In addition, he is responsible for the administration of the financial affairs of the City which include cash management and investments, debt management, financial accounting and reporting, procurement, risk management, and retiree benefits. Mr. de Mik came to the City from Knox County, Tennessee where he served as the Deputy Director of Finance and Administration. His other work experiences include service with the State of Tennessee Comptroller of the Treasury and Chipman and McMurray, Certified Public Accountants. Mr. de Mik earned a Bachelor of Science degree in Accounting and Business Administration from Southwest Baptist University, Bolivar, Missouri. He also is a licensed Certified Public Accountant.

#### Bernard A. Pishko, City Attorney

Bernard A. Pishko was first appointed by City Council as City Attorney in November 1997. He previously served as Deputy City Attorney from 1989 to 1997 and as an Assistant City Attorney from 1984 to 1989. He has practiced law since 1982. The City Attorney is also general counsel for the Norfolk School Board, Norfolk Recreational Facilities Authority, Norfolk Community Services Board, Hospital Authority of Norfolk, Norfolk Municipal Employees' Retirement System, Norfolk Electoral Board, Civil Service Commission and The Chrysler Museum of Art. Mr. Pishko is a member of many professional associations and community organizations. He received his undergraduate degree from Brown University, Providence, Rhode Island, a Masters degree in Business Administration from the College of William and Mary, Williamsburg, Virginia, and a Law degree from the Marshall-Wythe School of Law.

# **Governmental Services and Facilities**

In Virginia, cities and counties are not overlapping units of government. Each city or county is a distinct political entity providing services for the population within its respective jurisdiction. The City of Norfolk provides a comprehensive range of public services characteristic of its form of government under Virginia law. These general governmental services include police protection, fire and paramedical services, health and social services, planning and zoning management, code enforcement, storm water management, street maintenance, traffic control, parks and cemeteries operation and maintenance, recreation and library services, solid waste disposal and general administrative services. In addition, water, wastewater and parking facilities services are provided under an enterprise fund concept with user-charges set by City Council.

#### **Other Governmental Entities**

#### School Board of the City of Norfolk

The seven members of the School Board of the City of Norfolk (the "School Board") are appointed by the City Council. The School Board is a corporate body and in its corporate capacity is vested with all of the duties, obligations and responsibilities imposed upon school boards by law. The City Council is required to appropriate annually to the School Board the amount needed for the support of the public schools in maintaining educational programs which meet the standards of quality prescribed by law. Categorical aid from the Commonwealth of Virginia and the federal government designated for educational purposes is included in the City's General Fund budgetary revenue. This categorical aid, plus monies derived from local sources, provides the funds for the major share of the School Board's operations. On an ongoing basis, the City also issues debt to finance needed capital projects of the school system.

The School Board presently operates thirty-five (35) elementary schools, nine (9) middle schools, five (5) high schools and thirteen (13) auxiliary schools. For the fiscal year ended June 30, 2004, the School Board's expenditures for education totaled \$261,149,383.

#### National Maritime Center Authority

The National Maritime Center Authority (NMCA), a Virginia nonstock, not-for-profit, political subdivision of the Commonwealth of Virginia, was formed during 1988 as an administrative body for the planning, design and development (including fundraising) and operation of Nauticus, a public maritime education center which opened in June of 1994. City Council appointed commissioners who in turn designated management. Nauticus became a City department in Fiscal Year 1997.

#### Norfolk Airport Authority

The Norfolk Airport Authority, a political subdivision of the Commonwealth, was created to operate an airport and to promote industrial growth and consists of both an Airport Fund and an Investment Fund. The Authority's Commissioners are appointed by City Council, but the Commission designates its own management and has oversight responsibility for its own fiscal matters. The City does not provide funds for the operations of the Authority, and the Authority is required to submit its annual budget to the City Council for informational purposes only.

The Airport Fund was established by the Authority to account for the operations of the Norfolk International Airport (the "Airport"). Revenue generated by airport operations is used to meet all operating expenses and to provide for payment of all principal and interest on debt of the Authority related to the Airport.

The Authority finances individual capital projects by issuing bonds or obtaining loans and intergovernmental grants in its own name and concurrently entering into leases which provide for payment of all principal and interest on the related obligation as they become due. Revenue includes rental income on non-airport property owned by the Authority and interest on investments.

#### Hampton Roads Regional Jail Authority

The Hampton Roads Regional Jail Authority (HRRJA) is a regional organization which includes the cities of Hampton, Newport News, Norfolk and Portsmouth, created for the purpose of providing, operating and maintaining a regional jail facility for the correctional overflow from each community. HRRJA is a primary government, with no component units, and is governed by a twelve member Board of Directors, consisting of three representatives appointed by each of the member cities. The budgeting and financing of HRRJA are subject to the approval of the Board of Directors, with each individual having a single vote. HRRJA is responsible for its own financial matters, maintains its own books of account and is audited annually by independent accountants that it engages.

The facility, which opened in March 1998, consists of approximately 385,518 square feet of building area, including three housing building units, a support building and a central plant. The Jail holds 875 inmates of which 250 are designated to the City. The City is responsible for 28.57% of the total operating cost less the revenue derived from the Virginia Compensation Board and the per diem reimbursement from the Commonwealth for the housing of state inmates.

# The Southeastern Public Service Authority of Virginia

The Southeastern Public Service Authority (SPSA) is a joint venture of the cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk and Virginia Beach and the counties of Isle of Wight and Southampton, created for the purpose of providing, operating and maintaining a regional system for the collection, transfer, processing and disposal of solid waste refuse. SPSA is a primary government, with no component units, and is governed by an eight member Board of Directors, consisting of a representative appointed by each of the member cities and counties. The budgeting and financing of SPSA are subject to the approval of the Board of Directors, with each individual having a single vote. SPSA is responsible for its own financial matters, maintains its own books of account and is audited annually by independent accountants that it engages. The regional system includes a refuse-derived fuel plant and a fuel delivery system, located on federally-owned land in the City of Portsmouth, as well as

solid waste transfer stations in each of the member jurisdictions, a landfill, rolling stock and ancillary facilities, and an extensive recycling program which collects recyclable waste products from single-family homes and at drop-off centers.

Hampton Roads Transportation District Commission

Hampton Roads Transit was created on October 1, 1999 with the consolidation of the Tidewater Regional Transit ("TRT") and PENTRAN. It is believed to be the first voluntary merger of public transit agencies in the nation. The district continues to be a political subdivision of the Commonwealth of Virginia, formed as a joint exercise of governmental power in accordance with the provisions of Chapter 32 of Title 15.2 of the Code of Virginia. The district provides transportation facilities and services to the Cities of Norfolk, Chesapeake, Hampton, Newport News, Portsmouth, Suffolk, and Virginia Beach.

The Hampton Roads (formerly Tidewater) Transportation District Commission, a political subdivision of the Commonwealth of Virginia, was formed on May 9, 1973, as a joint exercise of governmental power in accordance with provisions of Chapter 32 of Title 15.1 of the Code of Virginia.

Table D-2
City of Norfolk, Virginia
Contributions to Hampton Roads Transportation District Commission
1999 - 2003

<u>Year</u>	<b>Contributions</b>
1999	\$3,432,893
2000	3,203,679
2001	3,406,229
2002	4,118,780
2003	3,803,700
2004	2,981,412

Sources: City of Norfolk Council Approved Fiscal Year 2004 Budget.

Hospital Authority of Norfolk

The Hospital Authority of Norfolk (HAN) is a tax-exempt, not-for-profit political subdivision of the Commonwealth. The Authority's nine-member Board of Commissioners is appointed by City Council and was created pursuant to an Agreement of Transfer dated July 1, 1988. The Authority operates Lake Taylor Hospital as a long-term care facility licensed by the Virginia State Health Department to provide a continuum of patient care ranging from sub-acute hospital services to skilled nursing care.

Norfolk Redevelopment and Housing Authority

The Norfolk Redevelopment and Housing Authority (NRHA) is a political subdivision of the Commonwealth which was created by the City on July 30, 1940, under the provisions of the United States Housing Act of 1937. The Authority provides subsidized public housing and administers redevelopment and conservation projects within the City in accordance with state and federal legislation. The seven members of the Board of Commissioners are appointed by City Council for staggered four-year terms. The Authority is responsible, through various funding agreements with the City, for the administration of such activities as community development, urban renewal, neighborhood development and conservation, and certain public housing services provided to residents of the City. However, the City does not exercise a significant degree of oversight responsibility for the NRHA as it is responsible for designating its own management, developing its own operating budget and executing major

contracts on its own behalf. The Authority is also responsible for its own fiscal matters as it maintains its own books of account, is audited annually by independent accountants that it engages, has authority over earnings, deficits and monies other than City contract funds and is fully responsible for the repayment of the debt it incurs.

#### ECONOMIC AND DEMOGRAPHIC FACTORS

#### **Population**

As reflected in the Table D-3, from 1970 to 2001, the population of the City declined; a fact which can be attributed in part to the clearance and redevelopment of blighted areas and to a reduction in the birth rate. More recently published population statistics suggest the City's population has now stabilized. The City is the second most populous city in Virginia, as shown in Table D-4.

Table D-3
Population Trend Comparisons
1960-2003

	Hampton Roads		
<u>Norfolk</u>	$MSA^{(1)}$	<u>Virginia</u>	<u>U.S.</u>
305,872	881,600	3,954,429	179,323,175
307,951	1,058,764	4,468,479	203,211,926
266,979	1,160,311	5,346,279	226,504,825
261,250	1,430,974	6,189,197	249,632,692
234,403	1,533,739	7,079,030	281,421,906
234,000 (3)	1,542,300	7,196,800 ⁽³⁾	$285,317,559^{(4)}$
234,100 (3)	$1,549,400 \binom{3}{3}$	7,287,800 ⁽³⁾	288,368,698 ⁽⁴⁾
234,100 ⁽³⁾	1,559,000	7,386,300 ⁽³⁾	290,809,777 ⁽⁴⁾
	305,872 307,951 266,979 261,250 234,403 234,000 ⁽³⁾ 234,100 ⁽³⁾	305,872 881,600 (2) 307,951 1,058,764 (2) 266,979 1,160,311 (2) 261,250 1,430,974 (2) 234,403 1,533,739 (3) 234,000 (3) 1,542,300 (3) 234,100 (3) 1,549,400 (3)	Norfolk         MSA ⁽¹⁾ Virginia           305,872         881,600         3,954,429           307,951         1,058,764         4,468,479           266,979         1,160,311         5,346,279           261,250         1,430,974         6,189,197           234,403         1,533,739         7,079,030           234,000         1,542,300         7,196,800

Sources: Various Reports of the Bureau of the Census.

Notes:

- (1) Until March 1993, the Hampton Roads MSA consisted of the Virginia localities of Norfolk, Chesapeake, Hampton, Newport News, Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg, Gloucester County, James City County, and York County. In March 1993, Mathews County and Isle of Wight County, Virginia, and Currituck County, North Carolina were added to the Hampton Roads MSA.
- (2) Weldon Cooper Center for Public Service, University of Virginia, is the source for the 1970 and the 1980 MSA Population.
- (3) Population estimate from Weldon Cooper Center for Public Service, University of Virginia.
- (4) Estimates from U.S. Census Bureau.

Table D-4
Five Most Populous Cities in Virginia

<u>City</u>	2000 Census Population	2003 Population Estimate
Virginia Beach	425,257	428,200
Norfolk		234,100
Chesapeake	199,184	206,600
Richmond		195,300
Newport News	180,697	180,900

Source: U.S. Department of Commerce, Bureau of the Census and the Weldon Cooper Center for Public Service, University of Virginia.

The age distribution of the City's population is presented in Table D-5.

Table D-5 City of Norfolk, Virginia City Population Distribution by Age 1960-2000

<b>Year</b>	<b>Population</b>	Under 20	<u>20-64</u>	65 or Older
1960	305,872	39.8%	54.5%	5.7%
1970	307,951	35.4	57.8	6.8
1980	266,979	30.7	60.1	9.2
1990	261,250	28.1	61.4	10.5
2000	234,403	27.3	61.5	11.2

Sources: Various Reports of the Bureau of the Census.

# **Housing and Construction Availability**

Table D-6 provides an annual breakdown of residential building permits since 1995.

Table D-6 City of Norfolk, Virginia Residential Construction Fiscal Years 1995 - 2004

Fiscal	Building	Number	Value
<u>Year</u>	<b>Permits</b>	of Units	(in thousands)
1995	208	453	\$24,856
1996	192	214	17.024
1997	177	177	12,880
1998	192	282	24,263
1999	174	241	21,872
2000	189	310	38,739
2001	185	401	35,109
2002	290	462	44,498
2003	284	497	54,520
2004	506	601	75,801

Source: Permit Tracking System, Department of Planning, City of Norfolk.

Table D-7 presents annual nonresidential construction, which includes commercial buildings, public buildings, schools, public utility buildings and miscellaneous structures.

Table D-7 City of Norfolk, Virginia Nonresidential Construction Fiscal Years 1995 - 2004

Fiscal <u>Year</u>	Building <u>Permits</u>	Value (in thousands)
1995	50	\$ 22,509
1996	46	26,147
1997	53	87,688
1998	54	79,500
1999	46	52,932
2000	45	138,472
2001	35	62,046
2002	53	51,451
2003	35	24,084
2004	71	142,658

Source: Permit Tracking System, Department of Planning, City of Norfolk.

# **Employment**

Businesses in the City provide residents with employment opportunities in a variety of industries of which services, government and trade are the most significant.

Table D-8
City of Norfolk, Virginia
Civilian Employment and Average Weekly Gross Wages
1st Quarter, 2004

	Number of	Number of	Average Weekly	
<u>Category</u>	<b>Establishments</b>	<b>Employees</b>	Gross Wage	<u>Percentage</u>
Construction	458	5,524	\$618	3.8%
Manufacturing	196	9,378	989	6.5
Trade, Transportation & Utilities	1,378	52,666	634	18.5
Information	110	3,841	1,035	2.7
Financial Activities	590	988	927	6.5
Professional & Business Services	907	1,801	778	13.1
Education and Health Services	493	21,032	661	14.7
Leisure and Hospitality	586	11,531	259	8.0
Other Services	660	3,823	431	2.7
Public Administration	<u>117</u>	<u>33,618</u>	<u>832</u>	<u>23.4</u>
Total	5,495	143,502	\$716	100.0%

Source: U.S. Department of Labor, Bureau of Labor Statistics.

### **Economic Development**

Norfolk is the business, financial, cultural, and educational center of Southeastern Virginia. The City is located at the epicenter of Virginia's second most heavily populated region. Economic development initiatives are focused on the attraction, expansion and retention of businesses, neighborhood and community revitalization, and commercial corridor development. These initiatives provide a structure for development and redevelopment throughout the City.

#### **Downtown Development**

Downtown offers a mix of cultural attractions and entertainment for its citizens and tourists. Resulting from the coordinated efforts of the City, downtown property assessed value increased 31.66% from Fiscal Year 1998 to Fiscal Year 2005. This renaissance is the result of many years of public-private partnerships and innovative planning. Since fiscal year 1997, new benchmarks for private investment of \$452 million in office development, \$591 million in residential, \$380 million in retail and restaurants and \$108 million in hospitality in hotels were established.

In 2003, the average asking rent for Downtown Class A office space increased 4.3% to \$20.31 a square foot, while the vacancy rate was 13.2% after an initial rise from the opening of the 225,000 square foot 150 West Main Street Building.

Table D-9 City of Norfolk, Virginia Downtown Norfolk Vacancy December 2004

Class A	Rentable SF	Vacant SF	% Vacant
150 West Main Street	226,183	30,385	13.43%
Crown Center	62,000	-	0.00
Dominion Tower	403,276	17,996	4.46
Main Street Tower	200,000	30,743	15.37
Norfolk Southern Tower	301,463	-	0.00
Town Point Center	130,266	23,961	18.39
World Trade Center	<u>366,941</u>	<u>53,664</u>	<u>14.62</u>
TOTAI	1,690,129	156,749	9.27%

Source: City of Norfolk, Department of Development, December 2004.

# **Development Policy Enhancements**

Commercial Revitalization

City-lead initiatives to stimulate commercial revitalization include: Tax Abatement Program (recently expanded to accommodate qualifying commercial and industrial properties in addition to the original residential program); Federal Empowerment and HUB Zones; State Enterprise Zones; Small Area Aesthetic Matching Grant Program; Aesthetic Improvement Grant Pool; Pedestrian Commercial Overlay Zones Tax and Grant Benefits; Concentrated Development Zone Incentives; public infrastructures; amenities; Tax Increment Financing Zones; and Revolving Loan Funds.

A Comprehensive Economic Development Strategy (CEDS), a local planning process designed to guide the economic growth of an area, was approved by City Council on August 24, 2004 and was approved by the U.S. Economic Development Administration (US EDA) on September 15, 2004. A CEDS is required to qualify for US EDA assistance for public works programs, economic adjustment, planning programs, and designation as an Economic Development District (EDD). A CEDS Committee will oversee the implementation and annual evaluation of the CEDS. A CEDS Committee will work closely with US EDA staff to identify eligible projects that will benefit from US EDA Public Works Grant assistance.

#### Empowerment/Enterprise Zones

In Fiscal Year 2003, twenty-eight businesses in the City qualified for and received \$1,170,338 in General Income Tax Credits, four businesses qualified for and received \$431,560 in Real Property Improvement Tax Credits, and twelve businesses qualified for and received \$202,536 in Job Grants. The four businesses receiving Real Property Improvement Tax Credits made \$1,479,590 in qualified improvements to their enterprise zone property. Some businesses qualified for all three state incentives; therefore, the above business figures cannot be totaled. Thirty-seven businesses in the City qualified for and received state tax credits and/or grants under the Virginia Enterprise Zone Program.

### Neighborhood Revitalization

Neighborhood revitalization is one of the City's core initiatives and part of the economic development plan. By increasing the diversity of housing opportunities, the City expects to increase the diversity of its citizenry and expand the tax base. The City's goal for neighborhood and commercial development is to provide an environment that will increase private sector investment, retail sales generation and corresponding municipal revenue generation, create a framework for targeted and coordinated public and private investment and build upon and coordinate with other ongoing community development initiatives.

The City's existing Tax Abatement Program is designed to benefit property owners who make substantial reinvestment in the rehabilitation and reuse of mixed-use, commercial, industrial and multi-tenant residential property that meets eligibility standards. The Tax Abatement Program can be leveraged with State and Federal Historic Tax Credits. There has been a 44.6% growth in total residential applications from February 2003 until March 2004 and, for the same period, a 41% growth in acceptance. The distribution of tax abatements is shown in Table D-10.

Table D-10
City of Norfolk, Virginia
Distribution of Tax Abatements

Value	Utilization
under \$50,000	21.6%
\$50,000 - \$ 74,999	25.8
\$75,000 - \$100,000	15.4
over \$100,000	37.3

Source: City of Norfolk, Virginia Economic Development Department.

### **Residential Investment**

Neighborhood corridors are experiencing a period of residential investment in new and existing properties. Norfolk's downtown area was ranked as one of the top ten for residential growth by USA Today in May 2001 based on census data. Since 2001, over 1,000 housing units are or have been under development in the Downtown core. Investors have delivered more than \$1 billion per year in investment during the past five years.

The Downtown 2010 Plan calls for a series of initiatives, many of which are residential, whereby all of the individual developments are coordinated with public improvements. The Come Home to Norfolk Housing Initiative has had a significant impact on residential housing citywide, with a particular emphasis in downtown Norfolk.

Two City-owned properties offered for development by RFP in 2003 are under construction, resulting in a \$60 million investment. The residential development occurring on these City-owned sites includes: Tazewell Properties, a \$40 million investment, featuring 77 condos (some lofts) and a first floor retail grocery; up to 248 apartments in two, seven-story buildings at Brambleton and Bute Streets; St. Paul's Place, a \$20 million project, featuring 90 condos (some lofts) alongside the MacArthur Center bringing a mix of historic façade, traditional condos (The Flats); and industrial lofts along St. Paul's Boulevard (The Lofts). In addition to this are 100 condominium units under construction at 388 Boush Street, an upscale community representing a \$26 million project with a hidden parking garage in the center.

Concurrently, private ventures in the Downtown area include: 411 Granby Street, a renovated office building housing 49 apartments; The Lofts on Granby with 49 rental units; and 44 condominiums at River Park, selling from \$220,000 to \$485,000. In fall 2004, Marathon Development Group announced an ambitious project, Granby Towers, which would deliver 400 units to the location of Granby Street/Brambleton Avenue across from the Federal Courthouse. This \$100 million project will feature two residential condominium towers with retail and amenities including pool, exercise facility, club area and parking.

# New Residential Multifamily Projects Beyond Downtown

Ghent. Bristol at Ghent has completed demolition of an obsolete property and acquired other properties from 14th Street to 17th Street between Granby Street and Monticello Avenue. The new multifamily development will feature 268 rental units with an attached five-story garage and clubhouse amenities. Phase II consists of 90 condominiums. The project cost is approximately \$30 million.

Ocean View. In 2002, the City of Norfolk purchased the former site of a 31-acre trailer park located on Pretty Lake in the heart of the East Ocean View Renaissance. The City negotiated a Land Disposition and Development Contract with Harbor Walk Development, LLC for the redevelopment of the property as "Harbor Walk of Norfolk," an upscale, 238-unit condominium project. With an overall anticipated market value in excess of \$70 million and annual revenues to the City in excess of \$1.5 million, the condominium project was opened to residents in June 2004. Unit prices range to over \$500,000. As of December 2004, 18 units have been sold and there are twenty contracts pending.

Larchmont. The Landings at Bolling Square is under construction. The demolition of the former Bolling Square Apartments is almost complete. The 184 condominium unit development is estimated as a \$60 million project.

Edge Management Area – Old Dominion University. Rehabilitation of a historic warehouse on 44th Street has begun. The building is the first along the Old Dominion University Edge Management area, an area that serves as a boundary for the University Village project. The developers are utilizing historic tax credits to retrofit the 52,000 square foot warehouse into 25 loft-style apartments and mini storage.

#### Residential Projects in Redevelopment Areas – Multifamily & Single family

Ocean View. The seven-mile stretch of beaches on the Chesapeake Bay known as Ocean View experienced redevelopment over the past decade. More than 200 new homes have been built in Ocean View with an average value of \$250,000. Several private and public redevelopment efforts are underway, adding homes to this revitalized area.

East Beach in Ocean View. The first phase of construction in East Beach began in early 2003. The City is guaranteed a minimum of \$8.5 million from the developer plus a commission on future lot sales. Infrastructure installed by the developer is estimated to be \$18 million. Once complete, the project will have 700 housing units with prices ranging from \$200,000 to \$1 million. Construction is anticipated to be complete within 10 years, adding approximately \$250 million to the tax base. As of December 10, 2004, ten of these homes have sold.

*Broad Creek*. Broad Creek is a \$200 million new community near Norfolk State University. Six hundred mixed-income homes are being built on the site of two former public housing projects. Through a \$35 million Hope VI grant from the U.S. Department of Housing and Urban Development, the Norfolk Redevelopment and Housing Authority is replacing Norfolk's two oldest public housing developments with a mix of single and multi-family housing, some publicly subsidized, and a small commercial area. Plans for redevelopment of other areas of the Broad Creek Renaissance area are underway.

Fort Norfolk. The City utilized the Urban Land Institute's advisory services and implemented some of its concepts into the initial redevelopment phase of the Fort Norfolk/Atlantic City area, including the creation of a property owners group to work in conjunction with the City and prospective developers. Fort Norfolk is a 30-acre urban waterfront redevelopment area linking Downtown to the region's medical complex and Ghent community. The majority of the land is owned by private businesses and landowners who are working with the City to achieve a development plan for the future. Current projects include the \$107 million continuous care retirement community, which broke ground in November 2004 and Plum Point, a \$1.3 million public park, completed in 2004.

Church Street Corridor. In Westchurch, 26 new homes are completed and occupied with sales exceeding \$3.6 million.

#### **Arts and Culture**

# **Support for the Arts and Humanities**

Norfolk is home to the Chrysler Museum of Art, Virginia Arts Festival, Virginia Ballet, Virginia Opera, Virginia Stage Company, and Virginia Symphony. A recent economic impact analysis revealed that in addition to recovering its annual grant investment in arts and cultural organizations, the net return to the City of Norfolk was \$1.70 for every \$1.00 invested for a return of almost three to one. Total direct fiscal impact in Fiscal Year 2003 of arts organizations was in excess of \$1 million. Approximately two-thirds of the City's revenue from the arts and cultural community is imported from patrons who reside outside of the City.

#### **Performing Arts & Entertainment Venues**

Norfolk's entertainment and theatre venues include the Attucks Theatre, the Harrison Opera House, Chrysler Museum, and the "Theater District" which includes Chrysler Hall, Jeanne and George Roper Theater, Wells Theatre, and the NorVa. In a study released by H. Blount Hunter in June 2004, Fiscal Impact of the Arts in Downtown, more than 400,000 patrons visited and spent in excess of \$1.1 million in retail and \$4.5 million for food while attending arts events. The D'Art Center is relocating into the historic Seldon Arcade. This new exhibition-style facility will feature artists-at-work studios where art is created and sold. The space also will feature a reception area and provide thoroughfare from Main Street to City Hall Avenue.

# **International Intermodal City Expansions**

#### Cruise Norfolk

In 2004, Nauticus, the National Maritime Center will have received more than 100,000 cruise ship passengers and 40,000 crewmembers to Norfolk. This makes the City the eleventh largest cruise port in the country, which provides regular service to Bermuda, the Bahamas and the Caribbean. Construction on the 80,000 square-foot cruise terminal is set to begin in January 2005 with completion scheduled for September 2006. The National

Oceanic and Atmospheric Administration (NOAA) recently announced Nauticus will serve as the location of its Virginia office for the Chesapeake Bay.

### **Norfolk Airport Authority**

Over 600,000 visitors fly into the Norfolk area every year. They spend approximately \$438.7 million a year, creating over 10,000 local jobs with a payroll of over \$158 million. Norfolk International Airport tenants and visitors directly or secondarily provide the region with more than 16,840 jobs, annual paychecks of more than \$300 million and a total dollar output of over \$795.3 million. In the summer of 2004, Independence Air began service to Norfolk and has added flights since opening. According to the Norfolk Airport Authority, through April 2004 Norfolk International Airport Passenger Traffic was up 10.71% over the same period in 2003, reaching all-time highs.

# **Hotel Development**

Norfolk shows consecutive growth in hotel occupancy over the past four years. In 2002, the Norfolk Metropolitan Statistical Area (MSA) ranked first in the nation, experiencing the highest gains in both hotel occupancy growth and average daily rate for any major market. In 2004, average daily rates rose from \$62 to \$72 per room, citywide occupancies expanded from 56% to almost 70%, and total hotel revenues increased from \$72.2 million to \$88.8 million.

The Downtown hotel market consists of the Waterside Marriott Convention Center, Sheraton Waterside, Clarion James Madison, Radisson Hotel, the Tazewell and the Courtyard by Marriott, located adjacent to the MacArthur Center. The Norfolk Waterside Hotel has been under an interior renovation including a new street-level restaurant that opened in November 2004, in a \$1 million renovated space. The Sheraton Norfolk Waterside also is undergoing renovations including refurbished banquet and restaurant space and other public areas, totaling \$500,000.

Two hotels outside of Downtown opened in 2004, Springhill Suites at Newtown Road and Residence Inn by Marriott in Lake Wright Executive Center that together represent a \$31.5 million investment. The Lake Wright Convention Center was redeveloped into a Quality Inn and Sleep Inn with several convention and meeting room facilities, a \$15 million project.

#### Waterfront Recreation Investment

Over \$17 million of overall investment has been made recently along Norfolk's waterfronts. In Ocean View, adjacent to the East Beach slated retail area called "Little Annapolis" is the Taylor's Landing Boatel Marina, a \$10 million private investment bringing 500 new recreational boat slips to the area.

# **Sports and Recreation**

Norfolk has several waterfronts with the Chesapeake Bay on its North boundary and two major rivers within its boundaries. The City has a public boat ramp in Willoughby Spit with access to the Chesapeake Bay, several other boat ramps and a rowing facility located in Lakewood Park.

The Norfolk Tides, the New York Mets' AAA baseball team, will open their 38th season in the City next spring. The team draws more than 500,000 fans annually to Harbor Park and the 5 millionth fan visited the baseball park last season. The 36-acre Harbor Park is on the Elizabeth River and hosts Tides baseball from April through September.

The Norfolk Admirals are a professional hockey club that plays its home games in the City's downtown sports facility, Scope Arena. They are one of 28 member teams of the American Hockey League (AHL), the

developmental league for the National Hockey League (NHL). The Admirals are a minor league affiliate of the Chicago Blackhawks, an NHL franchise. The 2004-2005 season marks the Admirals' fifth year in the AHL.

Arena Racing made its debut in Norfolk's Scope Arena in the winter of 2002. Arena racing drivers race one-half-scale stock cars on an indoor track. In the 2004-2005 season, the Arena Racing schedule includes more than 8 events.

Norfolk has two golf courses within the City and a third course and driving range under development. Ocean View Golf Course is a recently renovated daily fee golf course in the northern portion of the City. Lake Wright Golf Course also is a daily fee course with newly installed golf cart paths. A third golf course is currently under development on a former 53-acre landfill located behind Old Dominion University. The facility will include a nine-hole executive course, a driving range and practice facility. Construction for this course began in early 2004, with an expected completion date in late 2005.

Norfolk also is the home of two major universities, Old Dominion and Norfolk State. Norfolk State is a member of the MEAC conference and has a new football stadium located on its campus. Old Dominion has soccer, field hockey, and baseball stadiums for its key sports as well as a brand new convocation center, the Ted Constant Center, to host its men's and women's basketball programs.

#### **Retail Investment**

#### Military Highway

New investments in the Military Highway area have increased annual retail sales. Investments include the creation of 109,000 square feet of individual shops from a refit of the Montgomery Ward store in the JANAF Shopping Center, and a \$5 million renovation project located in the heart of 94-acre JANAF Shopping Center that includes retailers such as Blockbuster, Shoe Carnival, Lane Bryant, K&G, Supercuts, E B Games, Quiznos, Alltel, Nailson, Wasabi Japanese Steakhouse and Sushi Bar and Woodcrafters.

JANAF itself hosts TJ Maxx, Old Navy, Sports Authority, Circuit City and other big box retailers. In an effort to create a more congruent village concept, new landscaping work will be completed in the shopping center. Also, a \$20 million expansion to an existing Super Wal-Mart, adjoining JANAF, opened in the fall of 2004.

The Green Gifford automobile dealership expanded to two locations on Military Highway with an investment of \$6 million. This includes a new Nissan dealership. Additional new investment along the corridor includes the addition of a Wachovia branch bank. Further west along the Military Highway corridor is the Greater Ward's Corner commercial area, which is covered below.

### **Downtown Retail: Mixed-Use Projects**

The MacArthur Center, an urban mall and the result of a \$300 million public-private partnership, has served as a catalyst for investment in and around the Granby Street District. The Center opened with 70 stores new to the Hampton Roads region and 35 retailers new to Virginia. This development averages over 1 million monthly shoppers. Since the mall's opening, more than 60 sit-down restaurants have opened along the Granby corridor. The Granby District is continuing to fill and almost every storefront is occupied.

Three new development projects underway in Downtown feature storefront retail spaces – Trader Publishing, Tazewell Place and Granby Towers. New retail establishments have opened in the past year such as J.Austin's Men's Clothing, Elevations, Relative Theory Records and more.

Greater Wards Corner – (Includes Tidewater Drive and East Little Creek). Various other redevelopment projects are either planned or underway in the City. At Tidewater Boulevard and East Little Creek Road, adjacent to the Central Business Park, Wal-Mart is constructing a \$30 million, 207,000 square foot center that will employ

450 people. The 41-acre project is set to open in the summer of 2006. Under construction in Southern Shopping Center is a Ruby Tuesday's and an Army Base Navy Base Federal Credit Union was completed in 2004 at the entrance of Central Business Park.

A market study for the Greater Wards Corner Comprehensive Plan is underway. The plan indicates the potential for a new retail "Uptown District" between I-64 and Tidewater Drive, south of Little Creek Road. The plan suggests transforming this area into a mid-box retail district with a hotel – and in later phases – apartments and town houses. At Wards Corner, the plan suggests that when property owners along Granby Street and Little Creek Road are prepared to consider redevelopment, they rebuild the current strip shopping centers as mid-rise apartments built around private courtyards with street-level retail and hidden parking.

*Berkley*. Farm Fresh announced in November 2004 their plans to build a 25,000 square foot full-service grocery store at the Berkley Shopping Center site, located in the Berkley/Campostella area, home to the largest concentration of shipbuilding and repair businesses in Hampton Roads. The grocery-anchored shopping center will be developed by Perrine and Wheeler, who plan to have 18,000 square feet of small shops. Investment is estimated at \$4.7 million.

Ghent. Ghent, an upscale boutique retail district, boasts 400,000 square feet of retail space and artsy lofts. A \$4 million renovation transformed an automobile facility into the new 21 West shopping center with 21,000 square feet of retail space. The center's retail portion is completely leased with such tenants as Total Wine, Coldstone Creamery, Quiznos, Katana Japanese Steakhouse, Starbucks, UPS and Moe's Southwest Grill. Product and service retail in the Granby district include new additions such as Changes City Spa, Color Me Mine, Garden Gazebo, Ribbits Toy Store, and Jake's Place.

Old Dominion University - University Village. Three new shops have been recently signed in the Village's retail spaces. It is anticipated that 70 percent of the space will be devoted to food service, with the remainder by retail services and boutiques. The buildings along Monarch Way encompass approximately 50,000 square feet of retail. So far, the university's public safety office and fitness center have opened.

*Broad Creek.* The Market Square is envisioned to encompass neighborhood-oriented businesses such as locally-owned bakeries, restaurants, florists, a medical office building and grocery store. Front building elevations will be close to the street with significant architectural details.

East Ocean View. Complementing the existing boat yard and docks on Pretty Lake will be a public plaza lined with more marina-related shops and restaurants. Above the street-level storefronts will be several stories of residences. In addition, the "Village Square" will be lined with shops with residences above.

#### Norfolk's Educational Institutions

Available within the City are a wide variety of educational facilities including public elementary, middle and high schools, private and parochial schools, two universities, one college, one community college and a medical school.

#### **Public Schools**

Norfolk Public Schools have a low pupil-teacher ratio with class sizes well below the national average. Norfolk offers innovative public school programs, which include Early Childhood Education, a unique, comprehensive program for three and four-year-olds and their parents located in the public housing community of Diggs Town, at the Park Place/Colonial Place Community Center and at Ocean Air Elementary. The school system and the City have successfully worked together to provide the school's Early Childhood Program in three recreation centers and to establish a partnership between the school system and libraries that will result in extended learning and homework programs for middle and high school students.

Approximately \$90 million has been recently invested in Norfolk public schools. In 2004, the highly anticipated Norview High School was completed. Other facilities receiving renovations and new construction include Blair Middle School, Bay View Elementary, Granby High School, Meadowbrook and Taylor Elementary.

The City is home to the Governor's Magnet School for the Arts, Virginia's only magnet school for the arts, which offers classes in performing or visual arts to approximately 300 students from six cities and two counties. The school system also has a program for gifted science students that enable them to study at Eastern Virginia Medical School.

During the 2002-2003 academic year, the Norfolk Public School System received a number of awards and distinctions. The Council of the Great Schools, an organization consisting of approximately 60 of the nation's largest urban school districts, awarded Dr. John O. Simpson, superintendent for Norfolk Public Schools, the Richard R. Green Award during its Fall 2002 conference. Further, the Norfolk School Board (the "School Board") also earned national recognition during the school year. The School Board was one of 24 school districts to receive the prestigious Magna Award, presented by the American School Board Journal, for the School Board's Parent Representation Program, a program designed to enhance student learning and encourage community involvement in schools. Finally, members of Norfolk Public Schools' Class of 2003 earned nearly \$12 million in scholarships to attend colleges and universities located throughout the country.

Student population for the past five years is shown in Table D-11.

Table D-11 City of Norfolk, Virginia Public Schools Student Population Average Daily Membership Fiscal Years 1999-2004

	Average Daily	
Fiscal Year	<b>Membership</b>	Percent Change
1999	35,709	
2000	35,326	(0.11%)
2001	35,000	(0.09%)
2002	34,702	(0.09%)
2003	34,349	(0.10%)
2004	34,030	(0.09%)

Source: Virginia Department of Education. Superintendents Annual Report. Table 1, Membership.

#### **Private Education**

Over \$91 million has been invested in private educational facilities in the past five years, most of it in the past year. Saint Patrick Catholic School is slated to open in the fall of 2005. Specialized facilities concentrating on the arts and sports are increasingly popular. Norfolk Collegiate, Norfolk Academy and Norfolk Christian schools are all undergoing such development.

# **Higher Education**

Old Dominion University. Old Dominion University (ODU) was founded in 1930 as the Norfolk Division of the College of William and Mary and became an independent institution in 1962. Currently, ODU is one of only 100 public research universities nationwide, with a full and part-time enrollment of nearly 21,000 students. The institution is a nationally recognized provider of distance learning programs, which are delivered to 60 sites within the Commonwealth, six other states, and at various military sites throughout the world. The University has a current \$600 million economic impact on the Hampton Roads region and operates a number of basic and applied research

centers that complement the scientific work of NASA Langley, Jefferson Labs, and other federal and private laboratories in the region. Old Dominion University's online graduate engineering program is the largest in the nation, based on student enrollment numbers, thanks in large part to a unique CD-ROM program the University offers primarily to U.S. Navy nuclear-qualified officers.

Norfolk State University. Founded in 1935, Norfolk State University (NSU) is Virginia's largest public, historically black university (HBCU) and the seventh largest HBCU in the nation. The Fall 2003 enrollment total was 6,839. In addition to starting physical development of the R.I.S.E. Campus, the University is in the advanced stage of updating its Main Campus Master Plan and securing the City's endorsement. The University has Commonwealth of Virginia approval for a program of campus reinvestment and facilities construction and upgrades consistent with the updated master plan.

Virginia Wesleyan College. Virginia Wesleyan College, founded in 1966, is a private, coeducational, four-year liberal arts college on the Norfolk-Virginia Beach line. Approximately 1,442 students enrolled full and part-time in the 2004-2005 academic year. Virginia Wesleyan University's \$7.5 million, Village III Residences are expected to open in January 2005. This project will add 124 student beds in high-end housing comprised of one three-story apartment building housing 92 students and eight townhouses holding 32 students

Tidewater Community College. Tidewater Community College (TCC) is the second largest of the 23 community colleges in the Commonwealth of Virginia, enrolling more than 34,000 students annually. The college has been nationally recognized for its work in incorporating the best of technological advances into the teaching and learning process. It was recently cited by the American Council on Education as one of eight "Promising Practices" colleges and universities in the country for its work in international education. Forty-three percent of the region's residents who attended a college or university in Virginia last fall were enrolled at TCC.

Eastern Virginia Medical School. Eastern Virginia Medical School (EVMS) is one of three medical schools in Virginia and is Hampton Roads' first medical school. Students use over 30 area hospitals and clinics for practical training. The school relies on private funding, support from area cities, and limited state support to fulfill its mission. EVMS has made it possible for area residents to obtain specialized treatment locally, it has achieved a reputation which brings patients from other areas of the country for services in endocrinology, geriatrics pediatrics, oncology, otolaryngology, and reproductive medicine and infertility. EVMS recently successfully completed a \$62 million capital campaign that enabled it to create centers for biomedical research, general medical education and information technology, and aging and human development. The Medical School's full-time enrollment is 426 for the 2004 – 2005 academic year.

#### **Institutional Technology Parks**

Old Dominion University – University Village. Old Dominion University, in partnership with the City, the Norfolk Redevelopment and Housing Authority, and private developers, has initiated a large scale, mixed-use redevelopment project adjacent to its campus. This redevelopment project, the University Village, will directly impact 75 acres (13 City blocks) and result in over \$260 million in private and public investments within the project boundaries as well as stimulate additional development in the vicinity. The project includes student housing accommodating 960 students in apartments opened in time for the fall 2004 semester, complemented by approximately 50,000 square feet of street-level retail facing the Constant Center. In addition to the \$47 million Ted Constant Convocation Center, investments are in land assembly, the South Parking Garage, research/office buildings, apartments, and a hotel.

Norfolk State University's R.I.S.E Center. This 25-acre park will be an intergenerational, multi-purpose education and research facility enabling and promoting innovative applied technology development, business incubation and economic development activities. With a total of six Phases in all, facilities range from mixed-use labs, offices, and research to residential housing. Phases I & II will contain approximately 400,000 gross square feet, designed and constructed in a campus environment.

The second phase will house office spaces for new companies - these businesses will be able to take advantage of certain property tax breaks due to the building's location in Norfolk's enterprise/empowerment zone. In addition to the offices and tax breaks, the Center will feature technological advances including a guaranteed backup energy source that will function independently from the rest of the area and access to Internet3, the next generation of the Internet.

# **Technology Partnerships**

The \$30 million Public Health Center on Brambleton Avenue is a state-funded, state-of-the-art facility housing the Norfolk district's departments of Health, Forensics and other specialized agencies. In 2003, in a City-funded bio incubator space on the top floor, Eastern Virginia Medical School and Old Dominion University created a joint biotech research partnership – now home to a scientific world of biomedical research labs complete with laser technology and scientists. The Center for Bioelectrics is funded by grants awarded from the Federal Resources and Services Administration and the Air Force Office of Scientific Research.

In December 2004, Governor Warner proposed new forensic science funding for the expansion of the Eastern Regional Forensic Lab also located in the Public Health Center. The capital portion of the Governor's proposed amendments to the budget includes \$1.2 million to build-out 6,000 square feet of available space in the Eastern Regional Forensic Lab located in Norfolk. This expanded capacity will help meet the increased demand for scientific support by the criminal justice system.

VECTEC (Virginia Electronic Commerce Technology Center), at Christopher Newport University, assists small and mid-sized Virginia businesses with a variety of e-commerce services including e-commerce consulting, web site design and development, shopping systems and custom database development, e-government and non-profit assistance, e-commerce educational programs, and document and data retrieval services.

The Technology Applications Center (TAC) is an affiliate of Old Dominion University's College of Engineering and Technology. TAC leverages 30 state-of-the-art laboratory facilities and faculty expertise to solve specific engineering and management problems facing high-tech companies. TAC provides a wide spectrum of technical help including prototyping, customized testing, product development, and performance benchmarking.

The Economic Development Authority of the City of Norfolk continued funding two grants to be used by small businesses in 2004 totaling \$60,000 in appropriations to VECTEC and TAC.

#### **Norfolk's Medical Institutions**

Within the City of Norfolk there are a total of four general, acute care and specialized hospitals.

Sentara Healthcare. Sentara Norfolk General Hospital, a 569-bed tertiary care facility, is the region's only Level I Trauma Center. In 2002, Sentara Norfolk General's cardiac program ranked 23rd out of the 50 U.S. hospitals named for cardiac excellence.

Headquartered in Norfolk, Sentara is the premier not-for-profit health care provider in southeastern Virginia and northeastern North Carolina. Investments completed and underway include bricks and mortar and in cutting-edge technology. Sentara's new Heart Hospital will be a 112-bed, 254,000 square foot center – a \$100 million project. The Heart Hospital is leading the way for Sentara's 2010 expansion plan for the medical complex. Sentara Norfolk General also is investing approximately \$5 million in emergency room renovations.

Bon Secours DePaul Medical Center. The Bon Secours DePaul Medical Center has received \$8.6 million in state-of-the-art medical breakthrough equipment including advanced imaging services via a Computed Tomography (CT) Scanner, called the LightSpeed 16, the new EXCITE MRI machine that allows on-line viewing for physicians, and a Cardiac Catheterization Laboratory. In addition, a Linear Accelerator is coming on line in 2005 to allow more

diagnostic information in the treatment of all types of cancers. DePaul's hospital-based cancer center is one of the area's leading providers of radiation therapy. The hospital also recently announced that it performed the first retinal endovasular cannulation procedure in Virginia. The Wound Care and Hyperbaric Oxygen Center identifies and corrects healing deficiencies responsible for problem wounds. Over 450 physicians practice at the Bon Secours facility.

Province Place of DePaul, the newest Bon Secours assisted living residence, opened in Spring 2000. This \$7.5 million facility is licensed to provide care to 96 residents.

Children's Hospital of The King's Daughters. Children's Hospital of The King's Daughters (CHKD) is the only facility of its kind in Virginia and includes a dedicated pediatric emergency center. It is both a health care facility and teaching hospital, through its affiliation with the Eastern Virginia Medical School, and is licensed for 186 beds. The not-for-profit hospital was founded in 1961 and provides care to nearly 130,000 children each year as inpatients and outpatients, addressing routine and complex illnesses, injuries and chronic conditions. The CHKD Health System operates primary care pediatric practices, surgical practices, multi-service Health Centers and satellite offices throughout its service region. The CHKD also is affiliated with The Barry Robinson Center in Norfolk, a residential treatment center for children and adolescents with emotional problems or learning disabilities.

# The Virginia Port Authority

In 1981, the Virginia General Assembly passed landmark legislation designed to unify the ports in southeastern Virginia Hampton Roads harbor under a single agency, the Virginia Port Authority, with a single operating company, the Virginia International Terminals, Inc. The Port of Virginia, one of the world's largest natural deep-water harbors, is an integral part of Norfolk's economy.

Norfolk's location is suitable for international transportation and maritime commerce. Situated in the middle of the U.S. Atlantic Coast, the City serves as a gateway between world commerce centers and the industrial heartland of the United States. Accordingly, the local port industry has grown significantly. In addition to the Norfolk International Terminals, the Port of Virginia consists of Virginia's state-owned port system including Newport News Marine Terminal, Portsmouth Marine Terminal and Virginia Inland Port in Warren County.

The Port Authority is one of the largest general cargo ports on the U.S. East Coast. In 2003, nearly 14 million tons of cargo were shipped from the region's three main marine cargo terminals, marking the tenth consecutive year the Port of Virginia handled a record amount of general cargo. The cargo volume increased by 8.3% over that of 2002. Through October 2004, general cargo tonnage was up 5.5% from the same period in 2003. As a result of the events of September 11th, concern for security risk has increased. The Port of Virginia is one of the few U.S. Customs ports utilizing a computerized, truck-mounted gamma-ray machine to check containers' density. This technology allows monitors to ensure that the cargo being tested is what it is supposed to be and takes only 6 seconds per container.

# Table D-12 Virginia Port Authority Terminals General Cargo Tonnage Calendar Years 1999 – 2003

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Totals	11,813,048	11,969,105	11,546,482	12,824,430	13,983,616

Source: Virginia Port Authority.

Port-related business increased at the Virginia International Terminals, driving new capital investment into the region. By 2010, a 300-acre expansion of Norfolk International Terminal will be completed making it the largest intermodal center in the United States. Strong growth in Asian shipping, West Coast ports' labor lockouts, as well

as increasing traffic at regional distribution centers, have increased business at the Port of Virginia. Norfolk International Terminals (NIT) and the south berth are undergoing a \$280 million renovation that includes the purchase of eight of the largest container cranes in the world. The entire project should be completed by summer, 2005. Phase I of the NIT South wharf construction project is over 75% complete. Phase II of the NIT South improvements focuses on the backlands reconstruction for the straddle carrier operation and renovation of 96 acres of container yard. In addition, the NIT Command and Control Center is 99% complete and provides state-of-the-art facility for Security Operations, an additional \$5.6 million investment.

#### **Business, Industry and Commerce**

A variety of industrial, commercial and service employers are located within the City. Table D-13 presents data regarding the principal businesses in the City.

Table D-13
City of Norfolk, Virginia
Principal Non-Government Employers in 2004

Company	Number of Employees	Product/Service
	10,000+	
Sentara Healthcare		Health Care Facilities
	2.500 - 9.999	
Ford Motor Company, Inc.	2,000 2,522	Truck Manufacturing
r., J,	1 500 2 400	
Doub of America NA	1,500 - 2,499	Daulina
Bank of America, NA		Banking
Children's Hospital of The King's Daughter		Health Care Facilities
Old Dominion University		Colleges and Universities
	1,000 - 1,499	
Bon Secours DePaul Medical Center		Health Care Facility
Landmark Communications, Inc.		Newspapers and Media
Medical College of Hampton Roads		Private Colleges and Universities
Norfolk Southern Corporation		Railroads
NORSHIPCO		Shipbuilders and Repairers
	500 – 999	
American Funds Group		Mutual Funds
Anderson Commercial Photography		Commercial Photography
Coopervision		Wholesale Optical Goods
General Foam Plastics Corporation		Plastic Extractions
Metro Machine Corporation		Ship Builders and Repairers
Nash Finch Company, Inc.		Food Retail and Distribution
Norfolk Southern Corporation		Railroads
YMCA		Social Service
SunTrust Financial Corporation		Commercial Banking
Wachovia Corporation		Banking

Source: Virginia Employment Commission, 1st Quarter, 2004.

Table D-14 is a representation of selected business growth or expansions in Fiscal Year 2004.

# Table D-14 City of Norfolk, Virginia Business Growth A Sampling of Business Activity in 2004

ABNB Federal Credit Union	\$1,000,000	New branch in Central Business Park	
Boatel - East Ocean View	\$10,000,000	66,000 square foot building with a 500-boat dry storage capacity. Includes a bait and tackle store at Taylor's Landing Marina.	
CMA CGM	\$11,500,000	North American maritime headquarters in Lake Wright Executive Center	
Continental Broadband	\$233,000	Internet Service Provider	
Delphinus Engineering	\$2,250,000	Central Business Park; 2 buildings; 27,000 square foot building	
Ford Norfolk Assembly Plant	\$35,000,000	Expansion	
Furniture Classics consolidation	\$2,500,000	Purchased the Glopar Building (140,000 square feet). Will consolidate six warehouses.	
Hampton Roads Maritime Association	\$10,000,000	Terminal Boulevard	
Independence Air		Low-fare air carrier	
Marine Hydraulics International	\$15,000,000	Purchase of 6 acres including 1,400 foot pier	
Mark Barr I	\$1,800,000	Central Business Park; 2.4 acres; 18,700 square foot building	
Mark Barr II	\$1,800,000	Central Business Park; .02 acres; 19,500 square foot building	
P & P LLC	\$3,000,000	Office/Flex space at 18th & Church Streets	
Central Center Buildings	\$4,000,000	40,000 square foot building in Central Business Park, 3 stories	
Ride-A-Way Corp.	\$1,000,000	Disabled-modified vehicles supplier	
Rutter Mills law firm	\$2,300,000	Purchase and renovation of the Commonwealth Building and Loan Association building	
Sentara Heart Hospital	\$100,000,000	Heart hospital	
Targeted Publications	\$550,000	Specialty publications	
Taylor Real Estate, Inc.	\$5,000,000	Central Business Park 6.2 acres, three 20,000 square foot flex buildings	
Trader Publishing Electronic Media Headquarters	\$51,000,000	High rise office tower with ground floor retail and 444-space parking garage	
Virginia Oncology Phase II	\$2,000,000	_ Radiology lab equipment	
	\$259,933,000		

### **Business Parks**

Central Business Park. At Southern Shopping Center, adjacent to Central Business Park (CBP), a \$30 million Wal-Mart store has been announced and will be developed. In addition, ABNB (Army Base Navy Base) Federal Credit Union opened a new branch in February 2004 on the site. Planned office building development includes: 1) the Central Center Building, a 40,000 square foot three-story office development; 2) three, 20,000 square foot flex buildings on 6.2 acres; 3) a 26,000 square foot building and a 50,100 square foot building on 4.7 acres; and 4) a 18,700 square foot and a 19,500 square foot multi-tenant office/flex buildings costing \$1.8 million each on a 2.0 acre site and a 2.4 acre site. These planned projects will nearly complete the build out of the 41.0-acre Park, which is marketed at \$115,000 per acre.

Newtown Road Area. Development in the general area encompassing Newtown Road, I-64/Koger and Riverside Corporate Center includes Springhill Suites, a \$14.5 million, 120-suite hotel project, and a new Ruby Tuesday's. Further, Portfolio Recovery Associates built a \$2.5 million, 25,000 square foot building in the Riverside Corporate Center, which opened in 2003.

Church Street. P&P LLC office/flex space at 18th & Church Streets, a \$5.3 million project, is a public/private project between P&P, LLC and the City of Norfolk. It will create a flex/office park with seven buildings on approximately five acres. Four office buildings will measure 10,000 to 11,000 square feet each; and the three office/flex buildings will be 10,000 square feet each.

Norfolk Industrial Park. The Norfolk Industrial Park and adjacent land serve as home to several of the City's most rapidly expanding businesses. The majority of the park is in a special district zoned for empowerment, enterprise and hub zone benefits. Recently, MDV Nash Finch, a large distributor of perishable goods for the U.S. military command in Norfolk, expanded its presence in the Norfolk Industrial Park by purchasing a vacant 200,000 square foot warehouse facility for \$3.4 million. The company is making additional capital improvements to the property for a total investment of approximately \$1.2 million.

Lake Wright Executive Center. In February 2004, the City announced that CMA CGM would consolidate their North American headquarters and operations from New Jersey and Virginia Beach to Lake Wright Executive Center. They are building an 80,000 square foot office building on the last remaining parcel at Lake Wright. Total private investment is to be over \$11.5 million. They will create over 375 new jobs for Norfolk with an average salary of over \$40,000, excluding benefits. This completes the development of Lake Wright Executive Center, which has received over \$40 million of new investment in the past year. In May 2004, Virginia Oncology Associates moved into Lake Wright's medical office building that was developed by the Gee's Group.

#### **Maritime Business Investment**

The new Hampton Roads Maritime Center is a complement to the Virginia Port's expansion. The construction of this 23-acre center on International Terminal Boulevard was announced in August 2004 and is scheduled for completion by late spring 2005. The \$10 million project will house two shipping industry trade groups, the Hampton Roads Maritime and the Hampton Roads Shipping Associations. The complex will include two office buildings, a 15-foot sound wall and a training work yard.

In 2004, Marine Hydraulics International, Inc. opened the largest privately owned pier on the East Coast, investing \$21 million in a 1,220 foot long new pier at Lamberts Point made with 6.25 miles of concrete and 300,000 pounds of steel. This new pier is capable of docking four destroyers or two aircraft carriers.

Dredging has begun on the \$400 million Maersk Sealand cargo terminal on 560 undeveloped acres on the Portsmouth waterfront – across the Elizabeth River from the downtown and Berkley sections of Norfolk with construction of the terminal expected to be completed in 2007. The facility will feature 4,000 feet (1,219 meters) of deepwater berth space (four times the current amount), and serve as a Mid-Atlantic platform for future growth. Many high profile international companies have significant operations in the region and others are actively eyeing major distribution centers for the future. The amount of cargo shipped through Hampton Roads is expected to at least double by 2020, in part due to the area's attraction as a major distribution center. A.P. Møller is the parent company of Maersk Sealand, the world's largest shipping line.

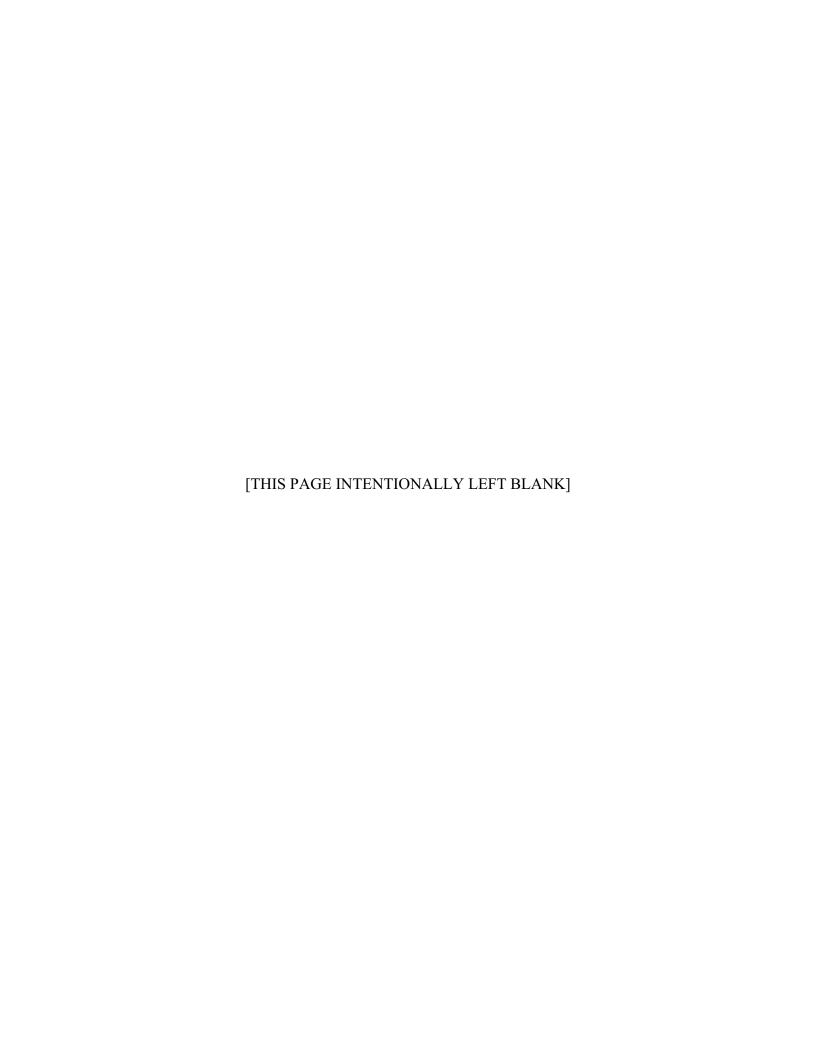
#### Military

The presence and role of the military in Norfolk remains a positive force and continues to have a significant impact on the local economy. The City is the home of the world's largest naval complex, with headquarters for Commander in Chief of U.S. Atlantic Command, NATO's Supreme Allied Command Atlantic, Commander in Chief U.S. Atlantic Fleet and other major naval commands. Although the military remains a key part of Hampton Roads' economy, the region has successfully diversified its economy in recent years.

The Navy's direct economic impact on the region was \$9.97 billion in 2003, comprised of a total annual payroll of \$6.37 billion and the balance consumed on goods and services and procurement contracts. The City expects to continue as a center of activity for the U.S. Navy with current total personnel (military and civilian) in excess of 70,000. There were 85,002 active-duty Navy military personnel in Hampton Roads in 2003, of which 71% were assigned to Norfolk.

Hampton Roads is the largest center of Coast Guard units in the world with the Atlantic Area Command and Maritime Defense Zone Atlantic in Portsmouth and its Maintenance & Logistic Command Atlantic headquarters in downtown Norfolk.

NATO announced plans to expand its headquarters in Norfolk in December 2004. NATO leaders unveiled a \$6.9 million, five-story expansion to its Norfolk complex, part of an \$11 million, multiyear project. The work is expected to be completed in 2006. The Allied Command Transformation, one of two NATO supreme commands expects to expand its civilian and military work force 16 percent to 750 employees from 624 by 2006.



# APPENDIX E

# SUMMARY OF NORFOLK - VIRGINIA BEACH WATER SERVICES CONTRACT



The City of Norfolk ("Norfolk") and the City of Virginia Beach ("Virginia Beach") entered into a Water Services Contract originally dated July 14, 1993, and amended and restated as of February 14, 2001 (as amended and restated, the "Water Services Contract"). Capitalized terms used in this Appendix are defined in the Water Services Contract or in the Official Statement. A copy of the Water Services Contract is available at the office of the Norfolk City Attorney. This Appendix does not purport to be complete, and reference is made to the Water Services Contract for a full and complete statement of its provisions.

#### **WATER SERVICES CONTRACT**

The Water Services Contract provides for Norfolk to store, wheel and treat Virginia Beach's Gaston and Stumpy Lake water (sometimes referred to herein as "Virginia Beach Water").

<u>Term of Contract</u>: The Water Services Contract is in effect until June 30, 2030, unless earlier terminated.

Water Treatment, Delivery Services and Obligations. Norfolk must receive and store Virginia Beach Water to locations satisfactory to both parties, transport the water through Norfolk's raw water system, treat the water, provide clear well storage, pump and transport the treated water to the metered points of delivery for the Virginia Beach Water distribution system, and perform all related acts to provide treated water to Virginia Beach. Virginia Beach must pay for these services and provide Virginia Beach Water. The Water Services Contract is a water services contract, not a contract for the sale of treated water, and the right of Virginia Beach to receive treated water under the Water Services Contract is dependent on Virginia Beach's ability to provide Virginia Beach Water, including, but not limited to, obtaining all necessary permits from governmental agencies, and constructing, operating and maintaining the Gaston pipeline, Stumpy Lake and Stumpy Lake pipeline providing Virginia Beach Water to discharge points satisfactory to Norfolk and Virginia Beach. Norfolk must obtain all permits required to construct, operate, maintain or expand Norfolk's water system in conjunction with performance of the Water Services Contract; provided, however, in obtaining or retaining any permit, Norfolk is only required to use its good faith best efforts by all reasonable legal means. Virginia Beach and Norfolk must cooperate and assist each other in obtaining the permits. Norfolk must also keep and maintain its water facilities in good working order in accordance with generally accepted standards for the operation and maintenance of a water system.

Except as otherwise provided in the Water Services Contract, Norfolk must deliver treated water to the Virginia Beach distribution system in such amounts as required by Virginia Beach, up to a total annual average amount of 45 MGD, but not to exceed 0.9 times the maximum sustainable rate of Gaston water which Virginia Beach is capable of delivering to Norfolk for Virginia Beach's use, plus 1.8 MGD for Stumpy Lake water. If the Stumpy Lake contract capacity increase option is exercised (as described under the caption "Effective Date" below), the maximum permissible total annual average amount stated above shall increase by 1.8 MGD to 46.8 MGD.

Virginia Beach is obligated to supply additional Virginia Beach Water above the Virginia Beach current monthly demand if requested by Norfolk, but is not required to supply an amount of Virginia Beach Water in any consecutive 36-month period in excess of the amount of treated water delivered to Virginia Beach under the Water Services Contract during the same period adjusted for certain losses.

Norfolk is obligated to exercise due care and adhere to generally-accepted engineering practices in the planning, construction, operation, maintenance, and expansion of its water system in order to meet its obligations under the Water Services Contract. Norfolk may not use, sell, assign, or otherwise commit to supply water in excess of Norfolk's safe yield, transmission or treatment capacity except as otherwise provided in the Water Services Contract. Norfolk may sell water, pursuant to a written contract, in excess of

its safe yield on an interruptible basis to industrial customers having installed and permitted alternate water sources available, with the consent of Virginia Beach, such consent not to be unreasonably withheld. Norfolk must terminate or restrict the supply of water to such interruptible customers (in accordance with the terms of each contract) in order that Norfolk can meet its obligations to Virginia Beach under the Water Services Contract.

Delivery Points and Measurement. Norfolk must deliver treated water to Virginia Beach at the delivery points set forth in the Water Services Contract, and at such additional points as may be mutually agreed upon by the parties. Unless otherwise agreed by both parties, Norfolk must construct, own and maintain treated water meter vaults, meters, and all associated facilities located at the delivery points. Virginia Beach must provide Norfolk's employees and agents ingress and egress across property owned by Virginia Beach to all of Norfolk's premises inside Virginia Beach's boundaries to install, operate, inspect, test, and maintain pipelines, pump stations, and facilities, and to read meters owned or maintained by Norfolk within the city limits of Virginia Beach or on property controlled by Virginia Beach. Virginia Beach must install and operate raw water meter or meters capable of measuring the amount of water being delivered from the Gaston pipeline and the Stumpy Lake pipeline to Norfolk including totalizing and recording total flow and daily rates of flow. Each meter must be tested at least once every two (2) years.

Quality and Pressure of Water Delivered to Virginia Beach. Norfolk must provide the necessary water treatment facilities, operational practices and related services to ensure that the quality of treated water delivered to Virginia Beach pursuant to the Water Services Contract meets all potable water standards mandated by federal and state law, rule or regulation. Except as otherwise provided in the Water Services Contract, Virginia Beach bears the sole responsibility for maintaining water quality beyond the delivery points within the Virginia Beach distribution system.

# Rates and Charges.

Method of Rate Determination. The annual rates charged by Norfolk for rendering treated water service under the terms of the Water Services Contract are based upon the utility basis of cost of service principles established by the American Water Works Association. Under such principles, Virginia Beach is charged for treated water service in a manner which recovers its allocable share of operation and maintenance expense, depreciation expense and return on rate base associated with the Norfolk water system.

Operation and Maintenance Expense. Virginia Beach must pay its share of annual expenses of the Norfolk water system, including appropriate departmental and city general overhead and payments in lieu of real estate and tangible personal property taxes, excluding payments to Norfolk's general fund and certain non-common payments.

*Depreciation Expense*. Virginia Beach must pay an annual depreciation expense associated with the Virginia Beach rate base, excluding construction work in progress.

Return on Rate Base. Virginia Beach must pay to Norfolk an annual return on the Virginia Beach rate base. The annual rate of return to be applied to the Virginia Beach rate base is computed by multiplying the embedded effective average annual interest cost of the Norfolk Utilities Department water system debt for the applicable rate year by 1.25.

Rate Base. The rate base for the purposes of the Water Services Contract is the original cost of the Norfolk water system less accrued depreciation (as shown on Norfolk's books and records). The rate base includes construction work in progress, expenditures which have been paid by Norfolk at the time of rate determination, and general facilities related to the Norfolk water system.

The rate base is allocated between Virginia Beach and Norfolk based on the contract allocation capacities and safe yield of Virginia Beach compared to the capacities of the Norfolk water system facilities

serving Virginia Beach and the combined system safe yield. All facilities in the Norfolk water system providing service or benefit to Virginia Beach, including raw water supply, storage and transmission, treatment, pumping, storage, and treated water transmission mains, meters, and administrative and general facilities are included in the rate base subject to allocation to Virginia Beach. Excluded from the rate base subject to allocation to Virginia Beach are: fire hydrants; retail meters and services; all transmission and distribution facilities not used to serve Virginia Beach; and land rights and general plant related to excluded items; and certain contributed capital.

*Fixed Capacity Charge*. Virginia Beach must pay an annual fixed capacity charge sufficient to recover depreciation expense and the return on the Virginia Beach rate base. This fixed capacity charge is payable in equal monthly amounts during the year or years for which rates are applicable.

Demand Charge. Virginia Beach must pay an annual unit demand charge per MGD applied to the measured_coincidental maximum hourly demand of Virginia Beach. The annual unit demand charge is based on the common to all operation and maintenance expense of the facilities providing service to Virginia Beach, excluding the energy portion of power costs, chemical costs, sludge disposal and other costs which vary directly with volume of treated water produced. The annual unit demand charge per MGD is 1.01 times the result of dividing the common to all operation and maintenance expense described in the preceding sentence by the sum of the Virginia Beach and Norfolk noncoincidental maximum hourly pumpage outputs at the Norfolk treatment plants providing service to Virginia Beach.

Supplemental Demand Charge. In the event that Virginia Beach's maximum hourly demand exceeds its contract hourly demand rate of 90 MGD, Virginia Beach must pay a supplemental demand charge for that portion of its maximum hourly demand which exceeds 90 MGD. The amount of the supplemental unit demand charge is equal to two (2) times the unit demand charge as determined in accordance with the formulas set forth above. If the Stumpy Lake contract capacity increase option is exercised (as described under the caption "Effective Date" below), the maximum hourly demand rate above shall be 93.6 MGD.

Commodity Charge. Virginia Beach must pay a commodity rate per 1,000 gallons of treated water. This charge is sufficient to recover the energy portion of power costs, chemical costs, sludge disposal, and other costs which vary directly with the volume of treated water produced. The Virginia Beach commodity charge is 1.01 times the amount determined by dividing the total variable cost described in the preceding sentence for the Norfolk water treatment plants providing service to Virginia Beach by the total treated water volume output of such Norfolk water treatment plants, in thousands of gallons.

Biennial Adjustment of Rates. Norfolk is obligated to develop projections of rates applicable to Virginia Beach for treated water service on a biennial basis based on a cost of service study prepared by an independent consulting firm. The projections of rates, along with a copy of the cost of service study, must be submitted to Virginia Beach not less than 120 days prior to the beginning of the two (2) year period. Virginia Beach will be billed monthly for treated water service by Norfolk using the projected rates applicable to water use beginning with the first day of the applicable fiscal year and for the remainder of the two (2) fiscal years. Such projections of rates, however, may be revised at any time, upon 60 days' advance notice, during the two (2) fiscal years by Norfolk should unexpected significant increases or decreases in Virginia Beach's allocated portion of Norfolk's water system costs occur during the fiscal years; however, Norfolk may not adjust Virginia Beach's rates more than once during the two (2) year period unless it also adjusts rates to its own retail customers.

Within six (6) months after the end of the second fiscal year, Norfolk must complete and submit to Virginia Beach a true-up schedule of rates and annual billings applicable to the previous two (2) fiscal years which reflects an allocation of costs of service based on actual cost and experience incurred by the Norfolk water system as shown in the audited books and records of Norfolk. The February, 2001, amendments to the amended and restated water services contract clarified the contract's methodology as to cost of service and true-up adjustments. Any resulting credits or payments applicable to treated water service resulting from this

true-up shall be divided into twelve equal payments or credits to be paid or applied during the second fiscal year.

# **Source and Priority of Payments.**

Source of Payment. Virginia Beach must make payments of all charges for treated water service, as well as charges upon termination of the Water Services Contract (the "termination payments") and any other charges payable under the Water Services Contract, solely from revenues received by Virginia Beach from charges paid by users of its water and sewer system and available to it for such purposes for so long as Virginia Beach operates its water and sewer system on a combined basis; provided, however, if Virginia Beach chooses to operate its water system separate and apart from its sewer system, then such charges must be paid solely from revenues of its water system. The charges payable under the Water Services Contract are not deemed to create or constitute an indebtedness or a pledge of the faith and credit of the Commonwealth or of any county, city, town or other political subdivision thereof, including Virginia Beach, for purposes of any constitutional, statutory or charter limitations.

Characterization of Charges under the Water Services Contract. The demand charge, supplemental demand charge, commodity charge, fixed capacity charge and termination payments are deemed to be a part of the annual operating expense of the Virginia Beach water and sewer system, or the water system, as applicable.

Except as described in the following paragraph, the demand charge, supplemental demand charge, commodity charge, fixed capacity charge and termination payments must be paid prior to the debt service on any water and sewer revenue bonds or double barrel bonds of Virginia Beach.

The payment of the fixed capacity charge is on parity with the payment of debt service on certain bonds of Virginia Beach. The payment of the termination payments is subordinate to the payment of debt service on such bonds.

Other than as described above, Virginia Beach will not issue any water and sewer revenue bonds or double barrel bonds as long as the Water Services Contract is in full force and effect (including (i) certain refunding bonds and (ii) revenue or general obligation bonds, the proceeds of which finance the cost of termination payments), the debt service on which will be payable prior to or on parity with Virginia Beach's payment obligations under the Water Services Contract (i.e., the demand charge, supplemental demand charge, commodity charge, fixed capacity charge and termination payments). Virginia Beach may not amend or supplement its Master Bond Resolution or enter into any successor indenture, trust agreement or resolution pledging the revenues of its water and sewer system, or its water system, as applicable, in such a way that will subordinate or adversely affect the pledge or the dignity thereof securing its payment obligations under the Water Services Contract (including the termination payments), without the written consent of Norfolk.

Maximum Amount and Final Payment Date of Termination Payments. The total amount of termination payments may not exceed \$102,252,907 (the "Maximum Termination Amount") or such higher amount as are Norfolk's actual costs to construct the facilities set forth in the Water Services Contract, in which event Norfolk must advise Virginia Beach of such higher Maximum Termination Amount and provide appropriate documentation supporting the same. Payment in full of the termination payments may be made no later than July 1, 2009. Virginia Beach may substitute insurance or a letter of credit for its obligation to make termination payments.

Issuance of Bonds. Virginia Beach retains the right under the Water Services Contract to issue either its revenue or general obligation bonds, the proceeds of which will finance the costs of making the termination payments. The determination as to whether to issue such bonds is within the complete control of Virginia Beach.

Rate Covenant. Virginia Beach must fix, charge and collect such rates, fees and other charges for the use of and for the services furnished by its water and sewer system, or its water system, as applicable, and must from time to time and as often as shall appear necessary, revise such rates, fees and other charges so that revenues received from its water and sewer or its water system, as appropriate, will be sufficient in each year to pay all amounts due under the Water Services Contract and all other operation and maintenance expenses of its water and sewer system, or its water system, as applicable.

Reduced Water Usage By Virginia Beach. If Virginia Beach receives reduced quantities of treated water from Norfolk because Virginia Beach has developed or acquired additional treated water supplies, Virginia Beach must for the duration of the Water Services Contract pay the annual fixed capacity charge, and the commodity rate for the actual treated water delivered to Virginia Beach. In addition, for a period of three (3) years, Virginia Beach must pay the annual demand charge applied to the greater of its hourly demand for the year or the highest maximum hourly demand experienced during the five (5) years immediately preceding the reduction.

<u>Curtailment</u>. The parties acknowledge in the Water Services Contract that supply or treatment problems may occur which prevent or limit Norfolk's ability to deliver treated water to Virginia Beach and/or Norfolk's other treated water customers. In the event that the conditions which prevent or limit Norfolk's ability to deliver treated water to Virginia Beach are applicable to other of Norfolk's customers, Norfolk must seek and, to the extent permitted by federal and state laws and regulations and national security constraints as declared by an official of the United States, enforce the imposition of treated water curtailment upon all affected customers, retail, wholesale or otherwise, in order that all such treated water customers will be similarly affected. If water supplies or services are curtailed in accordance with the procedures set forth above, Virginia Beach and Norfolk are obligated to cooperate by imposing conservation measures upon their respective customers. Neither Norfolk nor Virginia Beach are required to impose curtailments of water supply which would violate any requirements imposed by the State Water Control Board and other state and federal agencies and laws.

<u>Force Majeure and Hold Harmless</u>. Norfolk is not liable to Virginia Beach for any act, omission, or circumstances occasioned by or in consequence of any act of God, strikes, lockouts, acts of the public enemy, wars, etc.

In case of breaks in the mains, or malfunction of pumping machinery, or other water works equipment, or the occurrence of any other event which makes it necessary temporarily to reduce pressure or cease delivery of water to Virginia Beach, Norfolk must, if practicable, give previous notice of one week. In no case may any claim for damage due to reduced water service or pressure be made by Virginia Beach, and Virginia Beach must hold Norfolk harmless from any third-party suit arising from, or related to, reduced water service or pressure on the Virginia Beach distribution system unless Norfolk's negligence was the cause of the reduced water service or pressure.

Virginia Beach must hold harmless and indemnify Norfolk against any claims or losses arising from receipt of Virginia Beach Water by Norfolk or delivery by Norfolk of treated water to Virginia Beach, unless Norfolk's negligence or failure to comply with its water quality obligations was the cause of the damage which gave rise to the claim or loss.

Stumpy Lake contract capacity increase. By reason of Virginia Beach's acquisition of Stumpy Lake, Virginia Beach may desire to request an increase of the Virginia Beach contract capacities provided for in the Water Services Contract, from an annual average day rate of 45 MGD to 46.8 MGD, a maximum day rate of 67.5 MGD to 70.2 MGD, and a maximum hour rate of 90 MGD to 93.6 MGD. Norfolk, in its sole opinion, shall determine whether existing uncommitted constructed capacity exists in Norfolk facilities capable of meeting any of such additional contract capacities. Upon affirmative notice by Norfolk of such existing uncommitted constructed capacity, the increased contract capacities shall become effective on July 1 of the following year.

Breaches Related to Treated Water Safe Yield. If Virginia Beach's treated water average day demand (measured at the metering points) exceeds the lesser of 45 MGD or 99.0% of its treated water safe yield, Virginia Beach must reduce its treated water usage such that it does not exceed the lesser of 45 MGD or 99.0% of its treated water safe yield. In such event, Virginia Beach must institute adequate measures to ensure that its demand does not exceed the lesser of 45 MGD or 99.0% of its treated water safe yield. In addition, in such event, Norfolk may restrict the amount of treated water Virginia Beach may receive to ensure that the usage of Virginia Beach does not exceed the lesser of 45 MGD or 99.0% of its treated water safe yield. If the Stumpy Lake contract capacity increase option is exercised, Virginia Beach's maximum permissible annual average day demand of 45 MGD shall be 46.8 MGD.

If the Virginia Beach average day demand (measured at the metering points) exceeds the lesser of 45 MGD or 99.0% of its treated water safe yield, for a fiscal year, then Virginia Beach must pay a supplemental charge for all usage above the lesser of 45 MGD or 99.0% of its treated water safe yield in addition to all other charges provided in the Water Services Contract. The supplemental charge is the rate of \$4.00 per 1,000 gallons multiplied by the sum of 1 plus .05 times the number of years since 1990. If the Stumpy Lake contract capacity increase option is exercised, Virginia Beach's maximum permissible annual average day demand of 45 MGD shall be 46.8 MGD.

If the combined treated water average day demand of Norfolk and all of its treated water customers (measured at the treatment plants), excluding Virginia Beach and any other customers for which and to the extent that Norfolk wheels and treats raw water (adjusted for losses), exceeds Norfolk's treated water safe yield, then Norfolk must reduce its usage and that of its treated water customers, other than Virginia Beach and any other customers for which and to the extent that Norfolk wheels and treats their raw water (adjusted for losses), such that their combined treated water usage does not exceed Norfolk's treated water safe yield. In addition, in such event, Norfolk must at the request of Virginia Beach, to the extent permitted by federal and state laws and regulations and national security constraints as declared by an official of the United States, restrict the amount of treated water that Norfolk and its customers may receive to ensure that the combined usage of Norfolk and its customers (excluding Virginia Beach and any other customers for which and to the extent that Norfolk wheels and treats their raw water (adjusted for losses)) does not exceed Norfolk's treated water safe yield.

If the combined treated water average day demand of Norfolk and its customers (excluding Virginia Beach, any other customers for which and to the extent that Norfolk wheels and treats raw water, adjusted for losses, and interruptible) at the treatment plants exceeds Norfolk's treated water safe yield for a fiscal year, then it must pay a supplemental charge to Virginia Beach for all use above Norfolk's treated water safe yield. The supplemental charge is equal to \$400 per 1,000 gallons multiplied by the sum of 1 plus .05 times the number of years since 1990.

Breaches Related to Contract Capacities. If Virginia Beach's average day, maximum day or maximum hour demand exceeds the capacities contracted for and set forth in the Water Services Contract, then Virginia Beach must reduce its treated water demands to the average day, maximum day, and maximum hour capacities for which it has contracted in the Water Services Contract. To ensure that the necessary reductions do occur, Virginia Beach must institute adequate conservation measures. In addition, in such event, Norfolk may restrict the rate at which Virginia Beach may receive water to ensure that the demands of Virginia Beach do not exceed the average day, maximum day, or maximum hour capacities for which Virginia Beach has contracted.

Other Breaches. If either party breaches any term of the Water Services Contract, the other party must give written notice of the breach, identifying the provision(s) of the Water Services Contract which are being breached. The breaching party has six (6) months from the date of the notice within which to cure the breach. In the event the breach remains uncured for six (6) months, then the breaching party must pay to the other, for each 30 days or portion thereof the breach remains uncured, in addition to all other payments due

under the Water Services Contract, an amount, beginning with the seventh month, equal to 10% of the total charge for water on a monthly basis due by the City of Virginia Beach to Norfolk. This 10% amount increases to 50% should the breach remain uncured for an uninterrupted period of twelve months. However, no payment is required so long as the party in breach makes a continuous, good faith effort to cure the breach. These provisions of the Water Services Contract do not apply to the conditions, breaches and circumstances with respect to rates and charges or breaches related to treated water safe yield.

<u>Termination by Norfolk</u>. Norfolk may terminate the Water Services Contract if one (1) of the following events occurs:

- (a) The Gaston pipeline is not 50% complete by June 30, 1998, with (i) all permits and approvals still in force for the construction in progress and (ii) all permits and approvals necessary to withdraw water from Lake Gaston and have the pipeline fully operational.
- (b) The Gaston pipeline is not 100% complete and fully operational by June 30, 2000, with all permits and approvals still in force.
- (c) Virginia Beach does not give authorization for the construction of the Plant Hydraulic Improvements prior to January 1, 1997.
- (d) Virginia Beach does not pay in full a statement within 120 days of receipt unless the unpaid portion of such statement has been submitted to the dispute resolution process set forth in the Water Services Contract.
- (e) Virginia Beach has a total and permanent loss of ability to deliver Virginia Beach Water to Norfolk, including, but not limited to, equipment failure or destruction, or the loss of any required permit, approval, or authority. Such loss is deemed permanent if it continues for twenty-four consecutive months.
- (f) Virginia Beach willfully and continuously breaches any term of the Water Services Contract which significantly affects the operation of the Water Services Contract.

Upon termination of the Water Services Contract by Norfolk after the Gaston Pipeline is fully operational, Virginia Beach may receive water from Norfolk (in amounts to be determined by Norfolk) for three (3) years after the effective date of termination, if Norfolk has sufficient surplus water available, provided, however, if there is a then existing surplus water contract between Norfolk and Virginia Beach, then the terms of the surplus water contract govern. Virginia Beach must pay for all such surplus water at a rate equal to two (2) times the sum of the charges which would be applicable under the Water Services Contract. Except as described in this paragraph, Virginia Beach is not entitled to receive any water under the terms of the Water Services Contract after the effective date of termination of the Water Services Contract.

If Virginia Beach receives water from Norfolk which is not provided for under the terms of the Water Services Contract or another written contract between the parties, Virginia Beach must pay for all such water received at a rate equal to three (3) times the sum of the charges which would be applicable under the Water Services Contract.

In the event that the Water Services Contract is terminated by Norfolk prior to the date that Virginia Beach receives services under the Water Services Contract and prior to the date Virginia Beach authorizes the construction of the Plant Hydraulic Improvements, Virginia Beach must make certain payments to Norfolk as if Virginia Beach had terminated the Water Services Contract. In the event that the Water Services Contract is terminated by Norfolk prior to the date that Virginia Beach receives services under the Water Services Contract and after the date Virginia Beach authorizes the construction of the Plant Hydraulic Improvements, Virginia Beach must make certain other payments to Norfolk as if Virginia Beach had terminated the Water Services Contract In the event that the Water Services Contract is terminated by Norfolk, after the date that

Virginia Beach receives services under the Water Services Contract, or by Virginia Beach, Virginia Beach must pay to Norfolk an amount equal to the rate base allocated to Virginia Beach under the most recent cost of service study, provided such facilities are not necessary for Norfolk to provide service to Norfolk or customers of Norfolk with contracts for the sale of water, including Virginia Beach. Virginia Beach's rights to services under the Water Services Contract are not considered in making the determination of whether the facilities are necessary. In the event Norfolk needs part, but not all, of the facilities allocated to Virginia Beach, Virginia Beach must pay an amount equal to the part of the rate base allocated to Virginia Beach which is not needed by Norfolk. Virginia Beach must pay amounts described in this paragraph in not more than ten (10) equal annual installments beginning twelve months from the effective date of termination. In addition, with each such installment of principal, Virginia Beach must pay a return on the unpaid balance equal to the return on rate base determined for the immediately preceding fiscal year.

Termination by Virginia Beach. Virginia Beach may terminate the Water Services Contract at any time prior to authorizing construction of the Plant Hydraulic Improvements by providing written notice. Such termination is effective 90 days after the notice is provided. In the event of such termination by Virginia Beach, Virginia Beach is obligated to pay to Norfolk all of Norfolk's actual costs incurred between January 1, 1990, and the effective date of termination, to complete certain projects necessary to meet its obligations under the Water Services Contract, to the extent such projects are required to meet the obligations of the Water Services Contract and are not, at such time, needed to serve Norfolk or the customers of Norfolk with contracts for the sale of water, including Virginia Beach. Virginia Beach must pay such costs in not more than five (5) equal annual installments beginning on the effective date of termination. In addition, with each such installment of principal, Virginia Beach must pay a return on the unpaid balance equal to the return on rate base determined for each immediately preceding fiscal year.

Virginia Beach may, by written notice, terminate the Water Services Contract at any time after notifying Norfolk to proceed with the Plant Hydraulic Improvements and prior to receiving services pursuant to the Water Services Contract, if Virginia Beach believes that the Gaston pipeline will not become fully operational. Such termination is effective 90 days after the notice is provided. In the event of such termination by Virginia Beach, Virginia Beach is obligated to pay to Norfolk all of Norfolk's actual costs incurred between January 1, 1990, and the effective date of termination, to construct certain facilities necessary to meet its obligations under the Water Services Contract, to the extent such facilities are not, at such time, needed to serve Norfolk or the customers of Norfolk with written contracts for the sale of water, including Virginia Beach, in addition, the costs incurred to construct such facilities will include all costs incurred after the effective date of termination with respect to such construction projects in progress on the date termination notice was given; provided, however, such additional costs are the lesser of (i) the additional cost to complete any such project, or (ii) the cost to place the facilities being constructed or modified in good working order with reduced capacity so long as, in the case of the modification of a facility, the capacity is not less than it was before the modification was undertaken. In addition, Virginia Beach must pay any termination or other contract charges associated with terminating any such construction projects as a result of the termination of the Water Services Contract. Virginia Beach must pay all costs described above in not more than ten (10) equal annual installments beginning on the effective date of termination, provided, however that any termination or completion costs must be paid in not more than nine (9) equal annual installments beginning one (1) year after the effective date of termination. In addition, with each such installment of principal, Virginia Beach must pay a return on the unpaid balance equal to the return on rate base determined for each immediately preceding fiscal year.

Except as otherwise provided in the two preceding paragraphs, Virginia Beach may terminate the Water Services Contract if one (1) of the following events occurs:

(a) Norfolk has a permanent and total loss of ability to wheel and treat Gaston water for 24 consecutive months.

- (b) Norfolk willfully and continuously breaches any term of the Water Services Contract which significantly affects the operation of the Water Services Contract.
- (c) Virginia Beach has a total and permanent loss of ability to deliver Gaston water to Norfolk, including, but not limited, equipment failure or destruction, or the loss of any required permit, approval or authority. Such loss is deemed permanent if it continues for twenty-four (24) consecutive months.

Upon the effective date of termination by Virginia Beach other than for events specified in subparagraph (c) above, Virginia Beach has no further obligations or responsibilities to Norfolk under the Water Services Contract except to pay any outstanding amounts due for service provided under the Water Services Contract.



FORM OF OPINION OF BOND COUNSEL



#### [FORM OF OPINION OF BOND COUNSEL]

March 23, 2005

Mayor and Council of the City of Norfolk, Virginia Norfolk, Virginia

#### \$22,810,000 City of Norfolk, Virginia Water Revenue and Refunding Bonds Series 2005

#### Ladies and Gentlemen:

We have served as Bond Counsel in connection with the issuance and sale by the City of Norfolk, Virginia (the "City"), of its \$22,810,000 Water Revenue and Refunding Bonds, Series 2005 (the "2005 Bonds"), dated the date of delivery. The 2005 Bonds are issued pursuant to a Master Indenture of Trust dated as of November 1, 1993, as previously supplemented and amended (the "Master Indenture"), between SunTrust Bank, as successor trustee by merger, (the "Trustee") and the City, as supplemented by a Sixth Supplemental Indenture of Trust dated as of March 1, 2005 (the "Sixth Supplemental Indenture"), between the Trustee and the City. The Master Indenture and the Sixth Supplemental Indenture are referred to collectively as the "Indenture." Unless otherwise defined, each capitalized term used in this opinion has the meaning given to it in the Indenture.

We refer you to the 2005 Bonds and the Indenture for a description of the purposes for which the 2005 Bonds are issued, their terms and the security for them.

In connection with this opinion, we have examined the Constitution of Virginia and the applicable laws of both the United States and the Commonwealth of Virginia, including without limitation the Internal Revenue Code of 1986, as amended (the "Code"), and the Public Finance Act of 1991, Chapter 26, Title 15.2, Code of Virginia of 1950, as amended, and copies of proceedings and other documents relating to the issuance and sale of the 2005 Bonds by the City as we have deemed necessary to render this opinion.

Mayor and Council of the City of Norfolk, Virginia March 23, 2005 Page 2

As to questions of fact material to this opinion, we have relied upon (a) representations of the City, including, without limitation, representations as to the use of proceeds of the 2005 Bonds, (b) certifications of public officials furnished to us, and (c) certifications and representations contained in certificates of the City and others delivered at closing, without undertaking to verify them by independent investigation. We have assumed that all signatures on documents, certificates, and instruments examined by us are genuine, all documents, certificates, and instruments submitted to us as originals are authentic, and all documents, certificates, and instruments submitted to us as copies conform to the originals. In addition, we have assumed that all documents, certificates, and instruments relating to this financing have been duly authorized, executed, and delivered by all parties to them other than the City, and we have further assumed the due organization, existence, and powers of all parties other than the City.

Based on the foregoing, in our opinion, under current law:

- 1. The City has the requisite authority and power to enter into the Indenture to issue and sell the 2005 Bonds, and to apply the proceeds from the issuance and sale of the 2005 Bonds as set forth in the Sixth Supplemental Indenture. Neither the faith and credit of the Commonwealth of Virginia nor the faith and credit of the City or any other political subdivision of the Commonwealth of Virginia are pledged to the payment of the principal of or premium, if any, or interest on the 2005 Bonds.
- 2. The 2005 Bonds have been duly authorized, executed, and delivered in accordance with the Constitution and statutes of the Commonwealth of Virginia and the Indenture and constitute valid and binding limited obligations of the City, payable solely from the Net Revenues and other property pledged for such purpose under the Indenture for the security of the 2005 Bonds on a parity with the outstanding 1993 Bonds, 1995 Bonds, 1998 Bonds, 2001 Bonds, any Additional Bonds to be issued in the future under the Indenture and any Parity Indebtedness.
- 3. The Indenture has been duly authorized, executed, and delivered by the City, constitutes a valid and binding obligation of the City, and is enforceable against the City in accordance with its terms. The Sixth Supplemental Indenture complies in all respects with the requirements of the Master Indenture.
- 4. The Master Indenture requires the City to fix, revise, and collect rates, fees, and other charges for the use of and for the services furnished by the System so that Net Revenues will be sufficient to pay, among other things, when due Operating Expenses and the principal of and interest on the 1993 Bonds, the 1995 Bonds, the 1998 Bonds, the 2001 Bonds and the 2005 Bonds.
- 5. Additional Bonds may be issued and Parity Indebtedness incurred from time to time under the conditions, limitations, and restrictions set forth in the Master Indenture, and will

Mayor and Council of the City of Norfolk, Virginia March 23, 2005 Page 3

be secured equally and ratably as to the pledge of Net Revenues with the 1993 Bonds, the 1995 Bonds, the 1998 Bonds, the 2001 Bonds and the 2005 Bonds.

- 6. The obligations of the City under the 2005 Bonds and the Indenture are subject to the provisions of applicable bankruptcy, insolvency, reorganization, moratorium, and similar laws, now or hereafter in effect, relating to or affecting the enforcement of creditors' rights generally. Such obligations are also subject to usual equitable principles, which may limit the specific enforcement of certain remedies but which do not affect the validity of the obligations.
- 7. Interest on the 2005 Bonds, including any accrued "original issue discount" properly allocable to the owners of the 2005 Bonds is excludable from gross income for purposes of federal income taxation and will not be a specific item of tax preference for purposes of the federal alternative minimum income tax imposed on individuals and corporations (a "Specific Tax Preference Item"). It should be noted, however, that for purposes of the alternative minimum tax imposed on corporations (as defined for federal income tax purposes) under Section 56 of the Code, interest on the 2005 Bonds must be included in computed adjusted current earnings. The "original issue discount," on any of the 2005 Bonds, is the excess of its stated redemption price at maturity over the initial offering price to the public at which price a substantial amount of the 2005 Bonds of the same maturity was sold. The "public" does not include bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers.

In delivering this opinion, we are assuming continuing compliance with the covenant by the City to comply with the provisions of the Code, so that interest on the 2005 Bonds will remain excludable from gross income for federal income tax purposes and not become a Specific Tax Preference Item. Failure by the City to comply, subsequent to the issuance of the 2005 Bonds, with certain requirements of the Code regarding the use, expenditure and investment of Bond proceeds, the use of property financed thereby and the timely payment of certain investment earnings to the Treasury of the United States may cause interest on the 2005 Bonds to become includable in gross income for federal income tax purposes retroactively to the date of issuance of the 2005 Bonds.

8. Interest on the 2005 Bonds is excludable from gross income for purposes of income taxation by the Commonwealth of Virginia or any of its political subdivisions.

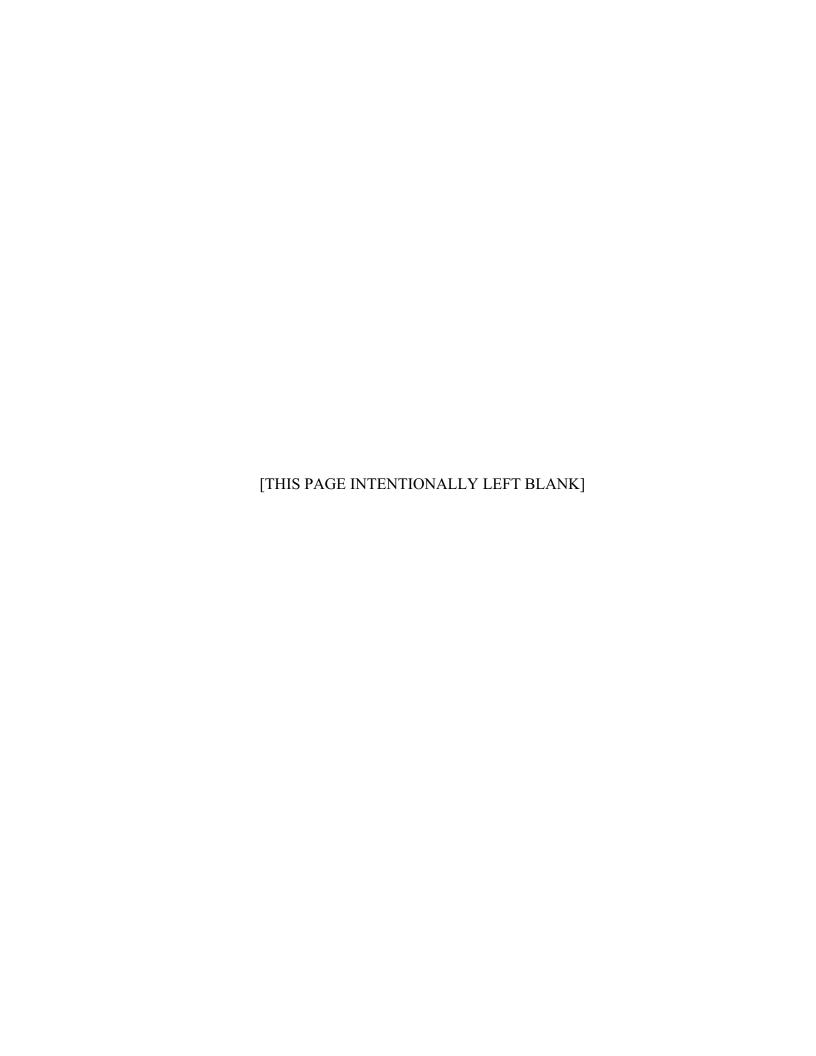
Our services as Bond Counsel to the City have been limited to rendering the foregoing opinion based on our review of such legal proceedings as we deem necessary to approve the validity of the 2005 Bonds and the tax-exempt status of the interest on them. The foregoing opinion is in no respect an opinion as to the City's business or financial resources, the City's ability to provide for the payment of the 2005 Bonds or the accuracy, completeness, or sufficiency of the Preliminary Official Statement, the Official Statement or other offering material relating to the 2005 Bonds and, therefore, we express no opinion as to the accuracy or completeness of the Preliminary Official Statement, the Official Statement or any other

Mayor and Council of the City of Norfolk, Virginia March 23, 2005 Page 4

information that may have been relied upon by any owner of the 2005 Bonds or anyone else in making a decision to purchase the 2005 Bonds.

Very truly yours,

FORM OF CONTINUING DISCLOSURE AGREEMENT



#### CONTINUING DISCLOSURE AGREEMENT

This Continuing Disclosure Agreement (the "Disclosure Agreement") is executed and delivered by the City of Norfolk, Virginia (the "City"), in connection with the issuance by the City of \$22,810,000 original aggregate principal amount of its Water Revenue and Refunding Bonds, Series 2005 (the "2005 Bonds"), pursuant to Ordinance No. 41,688 adopted by the Council of the City on January 11, 2005 (the "Ordinance"), and a Master Indenture of Trust dated as of November 1, 1993, as previously supplemented and amended, between the City and Crestar Bank, as trustee (the "Trustee"), as supplemented and amended by a Sixth Supplemental Indenture of Trust dated as of March 1, 2005, between the City and SunTrust Bank, as successor trustee to Crestar Bank by merger (collectively, the "Indenture"). The proceeds of the 2005 Bonds are being used by the City, along with other available funds, (i) to provide for the refunding of the City's \$17,000,000 Water Revenue Bond Anticipation Note, Series 2004 (ii) to finance certain costs of acquiring, constructing and equipping capital improvements to the City's water system, (iii) to provide the funding for the debt service reserve requirement for the 2005 Bonds and (iv) to pay the financing, credit enhancement and issuance costs of the 2005 Bonds. Pursuant to the Ordinance, the City approved the offering and sale of the 2005 Bonds to the public pursuant to an Official Statement relating to the 2005 Bonds, dated March 9, 2005 (the "Official Statement"). The City has determined that it constitutes an "obligated person" within the meaning of the Rule (hereinafter defined) with respect to the 2005 Bonds and, accordingly, hereby represents, covenants and agrees as follows:

- Section 1. Purpose of the Disclosure Agreement; Representation. This Disclosure Agreement is being executed and delivered by the City for the benefit of the Holders (as defined below) and in order to assist the Participating Underwriters in complying with the Rule (as defined below). The City acknowledges that it is undertaking primary responsibility for any reports, notices or disclosures that may be required under this Disclosure Agreement.
- **Section 2.** <u>Definitions</u>. In addition to the definitions set forth in the Ordinance, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

"Annual Financial Information" with respect to any Fiscal Year of the City means the following:

- (i) the financial statements (consisting of at least, for the Fiscal Year 2004, a statement of net assets, a statement of cash flows and a statement of revenues, expenses and changes in fund net assets and thereafter a statement of net assets, a statement of cash flows and a statement of revenues, expenses and changes in fund net assets) of the City's Water Utility Fund, which (A) are prepared annually in accordance with generally accepted accounting principles in effect from time to time consistently applied (provided that nothing in this Disclosure Agreement will prohibit the City after the date of the Official Statement from changing such principles so as to comply with generally accepted accounting principles as then in effect or to comply with a change in applicable Virginia law); and (B) are audited by an independent certified public accountant or firm of such accountants in accordance with generally accepted auditing standards as in effect from time to time; and
- (ii) updates of the operating data contained in the following sections and subsections of the Official Statement entitled: (a) "THE SYSTEM" -- "Customer Base" (but only with respect to Table 1, Average Metered Consumption); and (b) "FINANCIAL MANAGEMENT" -- "Water Rates" (but only with respect to Table 9, Retail Customers' Average Annual Cost, Table 10, Wholesale Customers' Average Annual Costs Virginia

Beach, Table 11, Wholesale Customers' Average Annual Costs U.S. Navy, including Norfolk and Virginia Beach and Table 12, Wholesale Customers' Average Annual Costs Chesapeake) and "Budget Process" (but only with respect to Table 15, Water Utility Fund Annual Budget for the two most recent fiscal years). All of the operating data to be provided pursuant to this subparagraph may be presented in the form of tables.

"Dissemination Agent" shall mean the City, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the City and which has filed with the City a written acceptance of such designation.

"Fiscal Year" shall mean the twelve-month period, at the end of which the financial position of the City and the results of its operations for such period are determined. Currently, the City's Fiscal Year begins July 1 and continues through June 30 of the next year.

"Holder" shall mean, for purposes of this Disclosure Agreement, any person who is a record owner or beneficial owner of a 2005 Bond.

"Make Public" or "Made Public" has the meaning set forth in Section 4 of this Disclosure Agreement.

"MSRB" shall mean the Municipal Securities Rulemaking Board.

"NRMSIR" shall mean each nationally recognized municipal securities information repository approved as such by the SEC from time to time.

"Participating Underwriter" shall mean any of the original underwriters of the 2005 Bonds required to comply with the Rule in connection with the offering of such 2005 Bonds.

"Rule" shall mean Rule 15c2-12 under the Securities Exchange Act of 1934 and any similar rules of the SEC relating to disclosure requirements in the offering and sale of municipal securities, all as in effect from time to time.

"SEC" shall mean the U.S. Securities and Exchange Commission.

"SID" shall mean any state-based information depository existing from time to time in the Commonwealth of Virginia for the purpose of receiving information concerning municipal securities and recognized as such by the SEC.

- **Section 3.** Obligations of the City. (a) The City shall complete the preparation of the Annual Financial Information with respect to any Fiscal Year of the City not later than 270 days after the end of such Fiscal Year.
- (b) The City shall, in accordance with the Rule, Make Public or cause to be Made Public by the Dissemination Agent (if other than the City), the Annual Financial Information within 30 days after it is prepared in final form.
- (c) The City shall Make Public or cause to be Made Public by the Dissemination Agent (if other than the City), in a timely manner, notice of any of the following events that may from time to time occur with respect to the 2005 Bonds, but with respect to the items in (i) through (xi), only if material:

- (i) principal and interest payment delinquencies;
- (ii) non-payment related defaults;
- (iii) unscheduled draws on debt service reserves reflecting financial difficulties;
- (iv) unscheduled draws on any credit enhancement maintained with respect to the 2005 Bonds reflecting financial difficulties;
  - (v) substitution of credit or liquidity providers, or their failure to perform;
- (vi) adverse tax opinions or events affecting the tax-exempt status of interest on the 2005 Bonds;
  - (vii) modifications to rights of Holders;
  - (viii) bond calls;
  - (ix) defeasances;
- (x) release, substitution or sale of property securing repayment of the 2005 Bonds;
  - (xi) rating changes; and
- (xii) the failure of the City on or before the date required by this Disclosure Agreement to provide Annual Financial Information to the persons and in the manner required by this Disclosure Agreement;

provided that nothing in this subsection (c) shall require the City to maintain any debt service reserve, credit enhancement or credit or liquidity providers with respect to the 2005 Bonds or to pledge any property as security for repayment of the 2005 Bonds.

- (d) The City shall notify each NRMSIR (as defined below) of any change in its Fiscal Year not later than the date on which it first provides any information to the NRMSIRs in the current Fiscal Year.
- **Section 4.** <u>Information Made Public</u>. Information shall be deemed to have been "Made Public" for purposes of this Disclosure Agreement if transmitted to each of the following as herein required:
- (a) (i) each NRMSIR, at its then current address, including the following NRMSIRs existing as of the date hereof:

Bloomberg Municipal Repositories 100 Business Park Drive Princeton, New Jersey 08558 Phone: (609) 279-3225

Fax: (609) 279-5962

Internet Address: Munis@Bloomberg.com

DPC Data Inc.

One Executive Drive

Fort Lee, New Jersey 07024

Phone: (201) 346-0701 Fax: (201) 947-0107

Internet Address: Nrmsir@dpcdata.com

Standard & Poor's J.J. Kenny Repository 55 Water Street, 45th Floor New York, New York 10041

Phone: (212) 438-4595 Fax: (212) 438-3975

Internet Address: Nrmsir repository@sandp.com

FT Interactive Data Attn: NRMSIR 100 William Street

New York, New York 10038

Phone: (212) 771-6999

Fax: (212) 771-7390 (Secondary Market Information) (212) 771-7391 (Preliminary Market Information)

Internet Address: Nrmsir@ftid.com

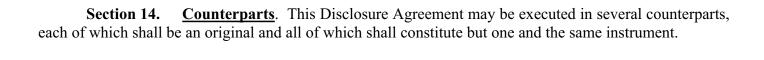
(ii) at its then current address, the SID, if any; provided that in the case of any information Made Public under Section 3(c), such information may be provided to the MSRB at the following address (or such other address as may at the time be in effect), in lieu of providing it to the NRMSIRs as described in clause (i) above:

Municipal Securities Rulemaking Board 1900 Duke Street Suite 600 Alexandria, Virginia 22314 Phone: (703) 797-6600

Fax: (703) 797-6704

**Section 5.** <u>Incorporation by Reference</u>. Any or all of the Annual Financial Information may be incorporated by reference from other documents, including official statements containing information with respect to the City, which have been filed with each of the NRMSIRs or the SEC. If the document incorporated by reference is a final official statement, it must be available from the MSRB. The City shall clearly identify each such other document so incorporated by reference.

- **Section 6.** <u>CUSIP Numbers</u>. The City shall reference, or cause the Dissemination Agent (if other than the City) to reference, the CUSIP prefix number for the 2005 Bonds in any notice provided to the NRMSIRs, the MSRB and/or the SID pursuant to Sections 3 and 4.
- **Section 7.** <u>Termination of Reporting Obligation</u>. The obligations of the City under this Disclosure Agreement shall terminate upon the earlier to occur of the legal defeasance or final retirement of the 2005 Bonds.
- **Section 8.** <u>Dissemination Agent</u>. The City may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement and may discharge any such Agent, with or without appointing a successor Dissemination Agent. If at any time there is not any other designated Dissemination Agent, the City shall be the Dissemination Agent.
- **Section 9.** <u>Amendment</u>. Notwithstanding any other provision of this Disclosure Agreement, the City may amend this Disclosure Agreement, if such amendment is supported by an opinion of independent counsel with expertise in federal securities laws addressed to the City and the Underwriter for the 2005 Bonds to the effect that such amendment is permitted or required by the Rule.
- **Section 10.** <u>Additional Information</u>. Nothing in this Disclosure Agreement shall be deemed to prevent the City from disseminating any other information using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any Annual Financial Information or notice of occurrence of an event listed in Section 3(c), in addition to that which is required by this Disclosure Agreement. If the City chooses to report any information in any Annual Financial Information or include any information in a notice of occurrence of an event listed in Section 3(c), in addition to that which is specifically required by this Disclosure Agreement, the City shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Financial Information or notice of occurrence of such an event.
- Section 11. <u>Default</u>. Any Holder, whether acting jointly or severally, may take such action as may be permitted by law against the appropriate public official to secure compliance with the obligations of the City under this Disclosure Agreement. In addition, any Holder, whether acting jointly or severally, may take such action as may be permitted by law to challenge the adequacy of any information provided pursuant to this Disclosure Agreement, or to enforce any other obligation of the City hereunder. A default under this Disclosure Agreement shall not be deemed an event of default under the Ordinance, the Indenture, any 2005 Bond or any other debt authorization of the City, and the sole remedy under this Disclosure Agreement in the event of any failure of the City to comply herewith shall be an action to compel performance. Nothing in this provision shall be deemed to restrict the rights or remedies of any Holder pursuant to the Securities Exchange Act of 1934, the rules and regulations promulgated thereunder, or other applicable laws.
- **Section 12.** <u>Central Post Office</u>. Any filing under this Disclosure Agreement may be made solely by transmitting such filing to the Texas Municipal Advisory Council (the "MAC") as provided at <a href="http://www.disclosureusa.org">http://www.disclosureusa.org</a> unless the SEC has withdrawn the interpretive advice in its letter to the MAC dated September 7, 2004.
- **Section 13.** <u>Beneficiaries</u>. This Disclosure Agreement shall inure solely to the benefit of the City, the Participating Underwriters and Holders from time to time of the 2005 Bonds, and shall create no rights in any other person or entity.



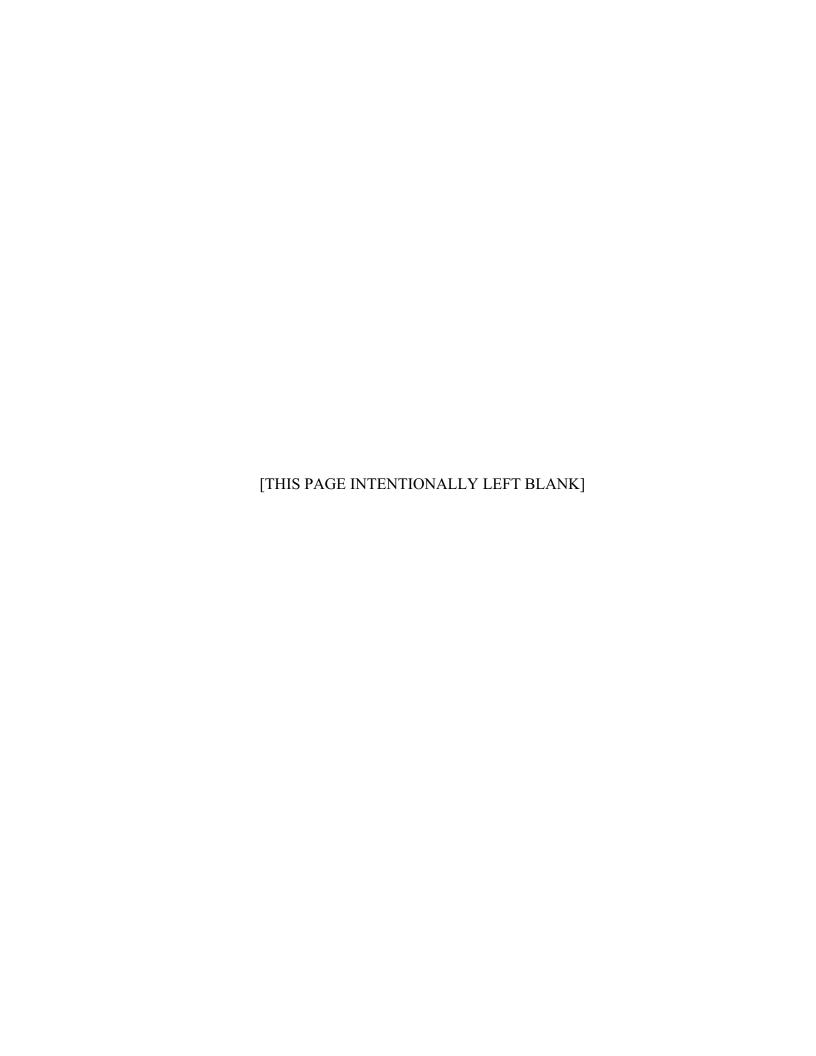
Date:, 2005		
	CITY	Y OF NORFOLK, VIRGINIA
	By:	City Manager, City of Norfolk, Virginia
	By:	Director of Finance,
		City of Norfolk, Virginia
AGREED TO AND ACKNOWLEDGED:		
By: Title:		
Approved as to Form and Correctness:		

Office of the City Attorney Norfolk, Virginia

[Signature page to Continuing Disclosure Agreement]



SPECIMEN MUNICIPAL BOND INSURANCE POLICY



#### FINANCIAL GUARANTY INSURANCE POLICY

# MBIA Insurance Corporation Armonk, New York 10504

Policy No. [NUMBER]

MBIA Insurance Corporation (the "Insurer"), in consideration of the payment of the premium and subject to the terms of this policy, hereby unconditionally and irrevocably guarantees to any owner, as hereinafter defined, of the following described obligations, the full and complete payment required to be made by or on behalf of the Issuer to [PAYING AGENT/TRUSTEE] or its successor (the "Paying Agent") of an amount equal to (i) the principal of (either at the stated maturity or by any advancement of maturity pursuant to a mandatory sinking fund payment) and interest on, the Obligations (as that term is defined below) as such payments shall become due but shall not be so paid (except that in the event of any acceleration of the due date of such principal by reason of mandatory or optional redemption or acceleration resulting from default or otherwise, other than any advancement of maturity pursuant to a mandatory sinking fund payment, the payments guaranteed hereby shall be made in such amounts and at such times as such payments of principal would have been due had there not been any such acceleration, unless the Insurer elects in its sole discretion, to pay in whole or in part any principal due by reason of such acceleration); and (ii) the reimbursement of any such payment which is subsequently recovered from any owner pursuant to a final judgment by a court of competent jurisdiction that such payment constitutes an avoidable preference to such owner within the meaning of any applicable bankruptcy law. The amounts referred to in clauses (i) and (ii) of the preceding sentence shall be referred to herein collectively as the "Insured Amounts." "Obligations" shall mean:

#### [PAR] [LEGAL NAME OF ISSUE]

Upon receipt of telephonic or telegraphic notice, such notice subsequently confirmed in writing by registered or certified mail, or upon receipt of written notice by registered or certified mail, by the Insurer from the Paying Agent or any owner of an Obligation the payment of an Insured Amount for which is then due, that such required payment has not been made, the Insurer on the due date of such payment or within one business day after receipt of notice of such nonpayment, whichever is later, will make a deposit of funds, in an account with U.S. Bank Trust National Association, in New York, New York, or its successor, sufficient for the payment of any such Insured Amounts which are then due. Upon presentment and surrender of such Obligations or presentment of such other proof of ownership of the Obligations, together with any appropriate instruments of assignment to evidence the assignment of the Insured Amounts due on the Obligations as are paid by the Insurer, and appropriate instruments to effect the appointment of the Insurer as agent for such owners of the Obligations in any legal proceeding related to payment of Insured Amounts on the Obligations, such instruments being in a form satisfactory to U.S. Bank Trust National Association, U.S. Bank Trust National Association shall disburse to such owners, or the Paying Agent payment of the Insured Amounts due on such Obligations, less any amount held by the Paying Agent for the payment of such Insured Amounts and legally available therefor. This policy does not insure against loss of any prepayment premium which may at any time be payable with respect to any Obligation.

As used herein, the term "owner" shall mean the registered owner of any Obligation as indicated in the books maintained by the Paying Agent, the Issuer, or any designee of the Issuer for such purpose. The term owner shall not include the Issuer or any party whose agreement with the Issuer constitutes the underlying security for the Obligations.

Any service of process on the Insurer may be made to the Insurer at its offices located at 113 King Street, Armonk, New York 10504 and such service of process shall be valid and binding.

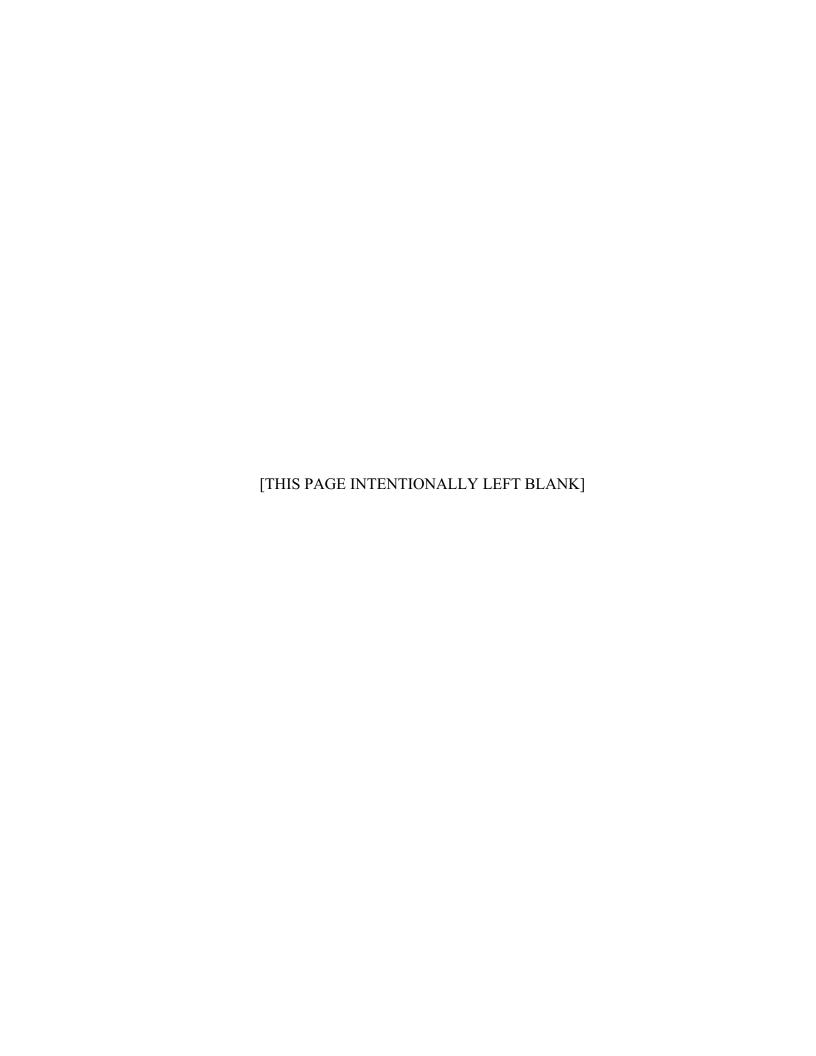
This policy is non-cancellable for any reason. The premium on this policy is not refundable for any reason including the payment prior to maturity of the Obligations.

IN WITNESS WHEREOF, the Insurer has caused this policy to be executed in facsimile on its behalf by its duly authorized officers, this [DAY] day of [MONTH, YEAR].

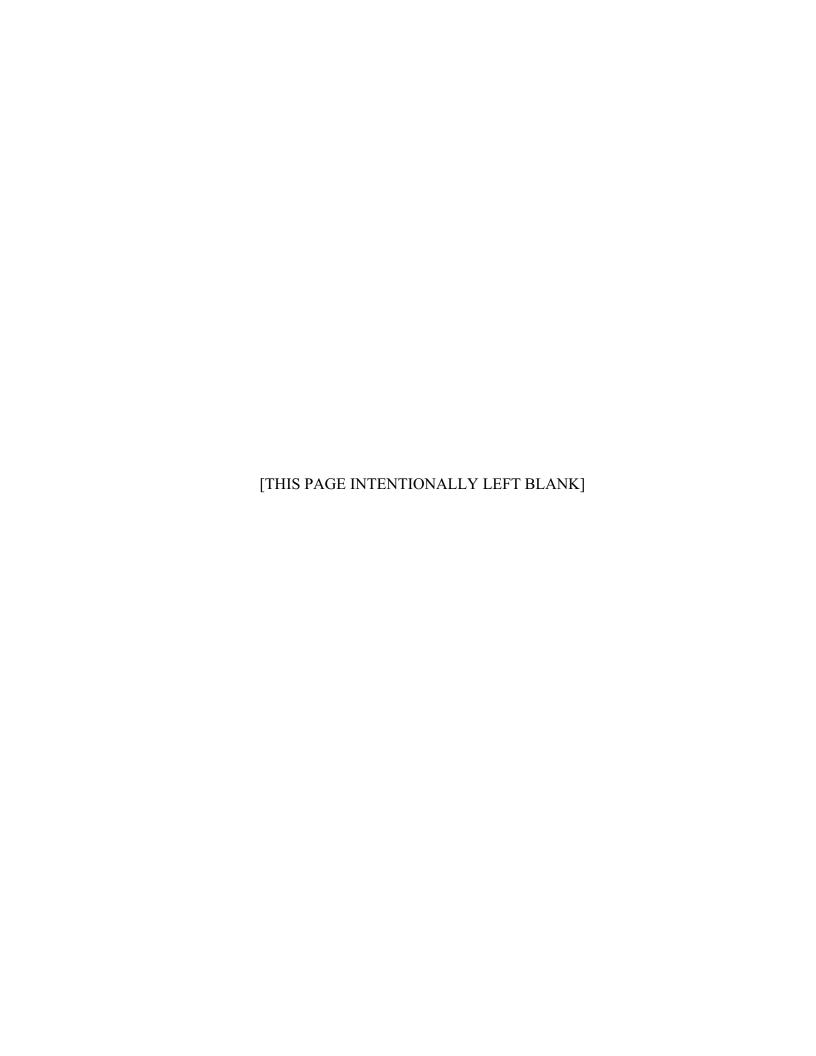
MBIA Insurance Corporation

President

Assistant Secretary



# SPECIMEN MUNICIPAL BOND DEBT SERVICE RESERVE FUND POLICY (2005 Bonds)



## DEBT SERVICE RESERVE SURETY BOND

# MBIA Insurance Corporation Armonk, New York 10504

Surety Bond No. XXXXXX

MBIA Insurance Corporation (the "Insurer"), in consideration of the payment of the premium and subject to the terms of this Surety Bond, hereby unconditionally and irrevocably guarantees the full and complete payments that are to be applied to payment of principal of and interest on the Obligations (as hereinafter defined) and that are required to be made by or on behalf of [NAME OF ISSUER] (the "Issuer") under the [TITLE OF THE DOCUMENT] (the "Document") to [NAME OF PAYING AGENT], (the "Paying Agent"), as such payments are due but shall not be so paid, in connection with the issuance by the Issuer of [TITLE OF THE OBLIGATIONS] (the "Obligations"), [IF PARITY " together with any bonds issued on a parity therewith,"], provided, that the amount available hereunder for payment pursuant to any one Demand for Payment (as hereinafter defined) shall not exceed [a: FIXED COVERAGE [Dollar Amount of Coverage] or the [Debt Service Reserve Fund Requirement] (as defined in the Document) for the Obligations, whichever is less (the "Surety Bond Limit"); provided, further, that the amount available at any particular time to be paid to the Paying Agent under the terms hereof (the "Surety Bond Coverage") shall be reduced and may be reinstated from time to time as set forth herein.] or [b: VARIABLE COVERAGE the annual amount set forth for the applicable bond year on Exhibit A attached hereto (the "Surety Bond Limit"); provided, further, that the amount available at any particular time to be paid to the Paying Agent under the terms hereof (the "Surety Bond Coverage") shall be reduced and may be reinstated from time to time as set forth herein.]

- 1. As used herein, the term "Owner" shall mean the registered owner of any Obligation as indicated in the books maintained by the applicable paying agent, the Issuer or any designee of the Issuer for such purpose. The term "Owner" shall not include the Issuer or any person or entity whose obligation or obligations by agreement constitute the underlying security or source of payment for the Obligations.
- 2. Upon the later of: (i) three (3) days after receipt by the Insurer of a demand for payment in the form attached hereto as Attachment 1 (the "Demand for Payment"), duly executed by the Paying Agent; or (ii) the payment date of the Obligations as specified in the Demand for Payment presented by the Paying Agent to the Insurer, the Insurer will make a deposit of funds in an account with U.S. Bank Trust National Association, in New York, New York, or its successor, sufficient for the payment to the Paying Agent, of amounts that are then due to the Paying Agent (as specified in the Demand for Payment) subject to the Surety Bond Coverage.
- 3. Demand for Payment hereunder may be made by prepaid telecopy, telex, TWX or telegram of the executed Demand for Payment c/o the Insurer. If a Demand for Payment made hereunder does not, in any instance, conform to the terms and conditions of this Surety Bond, the Insurer shall give notice to the Paying Agent, as promptly as reasonably practicable, that such Demand for Payment was not effected in accordance with the terms and conditions of this Surety Bond and briefly state the reason(s) therefor. Upon being notified that such Demand for Payment was not effected in accordance with this Surety Bond, the Paying Agent may attempt to correct any such nonconforming Demand for Payment if, and to the extent that, the Paying Agent is entitled and able to do so.
- 4. The amount payable by the Insurer under this Surety Bond pursuant to a particular Demand for Payment shall be limited to the Surety Bond Coverage. The Surety Bond Coverage shall be reduced automatically to the extent of each payment made by the Insurer hereunder and will be reinstated to the extent of each reimbursement of the Insurer pursuant to the provisions of Article II of the Financial Guaranty Agreement dated the date hereof between the Insurer and the [ISSUER OR OBLIGOR] (the "Financial Guaranty Agreement"); provided, [ANNUAL PREMIUM OPTION: that no premium is due and unpaid on this Surety Bond and] that in no event shall such reinstatement exceed the Surety Bond Limit. The Insurer will notify the Paying Agent, in writing within five (5) days of such reimbursement, that the Surety Bond Coverage has been reinstated to the extent of such reimbursement pursuant to the Financial Guaranty Agreement and such reinstatement shall be effective as of the date the Insurer gives such notice. The notice to the Paying Agent will be substantially in the form attached hereto as Attachment 2.

- 5. Any service of process on the Insurer or notice to the Insurer may be made to the Insurer at its offices located at 113 King Street, Armonk, New York 10504 and such service of process shall be valid and binding.
- 6. The term of this Surety Bond shall expire [ANNUAL PREMIUM OPTION: ,unless cancelled pursuant to paragraph 9 hereof,] on the earlier of (i) [MATURITY DATE] (the maturity date of the Obligations being currently issued), or (ii) the date on which the Issuer has made all payments required to be made on the Obligations pursuant to the Document.
- 7. The premium payable on this Surety Bond is not refundable for any reason, including the payment prior to maturity of the Obligations.
- 8. [OPTIONAL FIRST SENTENCE: This Surety Bond shall be governed by and interpreted under the laws of the State of (STATE)]. Any suit hereunder in connection with any payment may be brought only by the Paying Agent within [1 or 3 years] after (i) a Demand for Payment, with respect to such payment, is made pursuant to the terms of this Surety Bond and the Insurer has failed to make such payment, or (ii) payment would otherwise have been due hereunder but for the failure on the part of the Paying Agent to deliver to the Insurer a Demand for Payment pursuant to the terms of this Surety Bond, whichever is earlier.

#### [NOS. 9 and 11 are OPTIONAL]

- 9. Subject to the terms of the Document, the Issuer shall have the right, upon 30 days prior written notice to the Insurer and the Paying Agent, to terminate this Surety Bond. In the event of a failure by the Issuer to pay the premium due on this Surety Bond pursuant to the terms of the Financial Guaranty Agreement, the Insurer shall have the right upon [No. of days] days prior written notice to the Issuer and the Paying Agent to cancel this Surety Bond. No Demand for Payment shall be made subsequent to such notice of cancellation unless payments are due but shall not have been so paid in connection with the Obligations.
- 10. There shall be no acceleration payment due under this Policy unless such acceleration is at the sole option of the Insurer.
- 11. This policy is not covered by the Property/Casualty Insurance Security Fund specified in Article 76 of the New York Insurance Law.

In witness whereof, the Insurer has caused this Surety Bond to be executed in facsimile on its behalf by its duly authorized officers, this [DATE] day of [MONTH,YEAR]

MBIA INSURANCE CORPORATION
President
Assistant Secretary

SB-DSRF-9[STATE CODE] 4/95

# EXHIBIT A

# Surety Bond No. XXXXXX

Bond Year	Maximum Annual Debt Service
199 to 199	\$
199 to 199	\$
199 to 199	\$

Attachment 1
Surety Bond No. XXXXXX

# DEMAND FOR PAYMENT

	, 19
MBIA Insurance Corporation 113 King Street Armonk, New York 10504	
Attention: President	
Reference is made to the Surety Bond No. $\underline{XXXXXX}$ (the "Surety I Corporation (the "Insurer"). The terms which are capitalized herein and not otherwise the Surety Bond unless the context otherwise requires.	
The Paying Agent hereby certifies that:	
(a) In accordance with the provisions of the Document (attached hereto Owners of the Obligations on (the "Due Date") in an amount equal to \$	
(b) The [Debt Service Reserve Fund Requirement] for the Obligations is \$	
(c) The amounts legally available to the Paying Agent on the Due Date wi (the "Deficiency").	ill be \$ less than the Amount Due
(d) The Paying Agent has not heretofore made demand under the Surety B thereof.	ond for the Amount Due or any portion
The Paying Agent hereby requests that payment of the Deficiency (su made by the Insurer under the Surety Bond and directs that payment under the Surety Bond by bank wire transfer of federal or other immediately available funds in accordance	Bond be made to the following account
[Paying Agent's Account]	
[PAYIN	IG AGENT]
Ву	
Itc	

#### Bond No. XXXXXX

### NOTICE OF REINSTATEMENT

	, 19
[Paying Agent]	
[Address]	
Reference is made to the Surety Bond No. XXXXXX (the "Su Corporation (the "Insurer"). The terms which are capitalized herein and not other the Surety Bond unless the context otherwise requires.	
The Insurer hereby delivers notice that it is in receipt of payment Financial Guaranty Agreement and as of the date hereof the Surety Bond Coverage	
	MBIA Insurance Corporation
	President
Attest:	
	Assistant Secretary

